THE SEEDS AND PLANT VARIETIES ACT
(Cap 326)
THE SEEDS AND PLANT VARIETIES (VEGETATIVELY PROPAGATING SEEDS) REGULATIONS, 2023

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SCHEDULES

LEGAL NOTICE NO…….

THE SEEDS AND PLANT VARIETIES ACT
(Cap 326)

IN EXERCISE of the powers conferred by Section 3 of the Seeds and Plant Varieties Act, the Cabinet Secretary for Agriculture and Livestock Development makes the following Regulations: -	
THE SEEDS AND PLANT VARIETIES (VEGETATIVELY PROPAGATING SEEDS) REGULATIONS, 2023	
PART I -PRELIMINARY	
Citation	1. These Regulations may be cited as the Seeds and Plant Varieties (Vegetatively Propagating Seeds) Regulations, 2023
Interpretations	2. In these Regulations, unless the context otherwise requires: - **"Act"** The Seeds and Plant Varieties Act CAP 326 "**authorized person"** means a competent private or public persons authorized by the Service to perform specified functions in accordance to Section 3B (1) (b) of the Act; **"Basic Seed**" means progeny of breeder's seed or pre-basic seed; **"Breeder Seed"** means progeny of parental stock; **"Certified Seed"** means progeny of basic seed or seed of higher classes; **"Director"** refers to the Managing Director of Kenya Plant Health Inspectorate Service or the designated person; **"field inspection"** means an examination of a crop seed field including checking for effective isolation distance, hectarage of the seed field, off-types, foreign cultivars, weeds, pest and disease infestation as part of the seed certification programme; **"grafting service provider"** means a person registered with the Service to do commercial grafting and have demonstrated knowledge, skill and expertise in plant propagation methods such as grafting and budding of vegetatively propagating seed using appropriate tools and equipment;

	"isolation" means the required distance or time between a seed crop and any other crop of the same species or closely related species to prevent contamination; **"labelling"** means the process of affixing a tag or identification mark so as to ensure correct identification of any container of seed; **Maintainer** means the person or entity responsible for the production or maintenance of a variety included in a National List of Varieties eligible for certification or the National County-based Approved Farmer Variety List for production of Quality Declared Standard Seed **"Official Seed Sample"** means a seed sample taken in accordance with these Regulations; **"off-type plant"** means a plant which does not exhibit growth habits and characteristics based on variety descriptors approved by the Service; **"post control"** means the growing of plants from seed lots which have been tested or certified to further determine and confirm varietal purity and freedom from disease infestation; **"Pre-basic"** means progeny of breeder's seed; **'Pre control'** means the growing of plants from seed lots of imported seed or seed to be used for further seed generation or seed class to further determine freedom from disease infestation; **"Prescribed Seeds"** means vegetatively propagated seeds for sale declared as prescribed seeds in accordance with Regulation 11; **"Quality Declared Standard Seed"** means seed produced by a registered small-scale producer which has been subjected to quality control measures as prescribed in these regulations and is either a progeny of certified standard seed or a progeny of the National County Based Approved Farmer Variety -**"sealing"** means the stage in processing at which the seed is appropriately secured against any tampering and contamination; **"Seed class"** - means a stage in seed multiplication well defined in respect to the progeny seed standard; **"seed field**" is a delineated area intended for seed crop or planted with a seed crop for inspection;

	"seed health" means the level of freedom of either the seed or the seed crop from seed-borne diseases and pests; **"seed lot"** means a specified quantity or number of units of propagating material, identifiable by its homogeneity or uniformity of composition represented by one sample. **" seed producer"** means a person registered by the Service to grow or produce and sell either certified or quality declared standard seed of vegetatively propagating seeds for plant species in the First Schedule and, subject to regulation 5(8), includes a seed merchant as provided for under The Seeds and Plant Varieties (Seeds) Regulations 2016. **"seed quality"** means seeds that have met the minimum standards and hence are of high varietal and physical purity, are free from weeds, seed borne diseases and pests and have high potential for establishment; **"seed seller"**- means a person registered by the Service to sell Certified vegetatively propagating seeds and Quality declared standard seed for plant species in the First Schedule and, subject to regulation 5(8), includes a seed merchant as provided for under The Seeds and Plant Varieties (Seeds) Regulations 2016; "**seed source**" means a crop situated in a delineated area or location and listed under Regulation 8 and maintained under standards in the Seventh Schedule and prescribed guidelines in the Ninth Schedule and from which reproductive plant parts such as scions, rootstocks, sets, cuttings are collected for further multiplication; **"seed testing"** means the examination and analysis of a sample of seed to determine its quality; **"Seed preparation"** means all those activities that the vegetatively propagating seed is subjected to other than testing, between harvesting and sale to enhance quality; **"Service"** means the Kenya Plant Health Inspectorate Service established by the Kenya Plant Health Inspectorate Service as defined under section 2 of the Act **"standard"** means the level of quality achieved during field inspection or a laboratory test as defined in these Regulations;

	"Standard Seed" means a progeny of certified third generation or certified standard seed or by declaration by the Cabinet Secretary in accordance with regulation 16(3); **"treatment'** means to disinfect, disinfest or protect seed from pest and diseases as part of the seed certification process; **"vegetatively Propagating Seed crop"** means a crop that is grown for the specific purpose of producing seed; "**vegetatively Propagating Seed facility**"- means a physical location that conforms to prescribed standards which is approved for use in commercial production and sale of vegetatively propagating seed and includes warehouse, shed, store, lab or field; **"Vegetatively Propagating Seed"** means that part of a plant which is or is intended to be used for propagation and includes any seedling, corm, cutting, bulb, bulbil, layer, marcott, root, runner, scion, set, split, stem, stock, stump, sucker, tuber, plantlet,rooted apical cuttings, or mini tuber so used or intended to be so used;
Scope of the regulations	3. These regulations shall; a) apply to production, for purposes of sale, of quality declared standard seed and certified seed of vegetatively propagating seed of prescribed plant species b) not apply to vegetatively propagating seed produced by farmers for their own use and sharing among farmers
Object and Purpose	4. (1) The object and purpose of these Regulations is to enhance quality and access of vegetatively propagating seed. (2) Without prejudice to the generality of sub regulation 1, the object and purpose of these regulations is to; a) provide procedures for the registration of producers, grafting service providers and sellers of vegetatively propagating seed b) provide procedures for the production, preparation and sale of vegetatively propagating seed c) provide for compliance and enforcement of measures for persons in vegetatively propagating seed.
PART II: REGISTRATION	
Registration of producers of vegetatively propagating seed	5. (1) Every person who intends to be a producer of vegetatively propagating seed for sale shall apply to the Service for registration as a producer of Vegetatively Propagating Seed.

	(2) Applicants intending to produce Quality Declared Standard Seed shall only be registered as small-scale producers provided for under the Fifth Schedule. (3) Every application shall be in Form VPS 1A in the Third Schedule and shall be accompanied by the non-refundable application fee prescribed in the Fourth Schedule. (4) The Service shall; (a) within 5 days acknowledge receipt of an application in 3 (3) (b) evaluate applications and may undertake a visit to the premise within 14 days from the date of acknowledgement to verify compliance to the requirements (c) register and issue a certificate of registration within 30 days from the date of acknowledgement where the applicant has met requirements specified in the Fifth Schedule and paid registration fee specified in the Fourth Schedule (d) within 21 days from the date of acknowledgement of receipt of application, notify the applicant where the application does not meet requirements (5) The certificate of registration issued in 4 (c) shall be in Form VPS 1B as provided for in the Third Schedule and shall specify such conditions with respect to the growing, production, preparation or selling of the Vegetatively Propagating Seeds. (6) Seed Merchants already registered under Seeds and Plant Variety (Seeds) Regulations 2016 for production of seed shall register their intention to transact in vegetatively propagating seed in Form VPS 1C in the Third Schedule (7) The Service shall endorse a registration a Certificate for a Seed Merchant whose application meets the requirements for registration as a Vegetatively Propagating Seed producer as provided for under these regulations and such endorsement shall be equivalent to a Certificate of registration as a VPS producer. (8) The Service shall maintain a Register for the persons registered under sub regulation 4 (c) and 7. (9) The Service shall ensure that the Register in (8) is accessible to the public. (10) Any person who produces Vegetatively Propagating Seed for sale without a registration certificate from the Service commits an offence.

Registration of grafting service providers	6. (1) Any person who intends to offer grafting of Vegetatively Propagating Seed services and is neither a registered seed producer nor registered seed seller shall apply to the Service for registration as a grafting service provider. (2) An application for registration as a grafting service provider shall be made in VPS Form 2A and shall be required to meet the following minimum requirements (a) provide proof of basic training in handling, processing of and grafting of Vegetatively Propagating seeds (b) One year of experience for working with a registered seed producer (c) Endorsement of the application by the County Executive Committee Member responsible for matters relating to crops; (3) The Service shall upon receipt of an application; (a) within 5 days acknowledge receipt of an application in 6 (2) (b) evaluate applications within 14 days from the date of acknowledgement to verify compliance to the requirements (c) register and issue a certificate of registration within 30 days from the date of acknowledgement where the applicant has met requirements specified in the Fifth Schedule and paid registration fee specified in the Fourth Schedule (d) within 21 days from the date of acknowledgement of receipt of application, notify the applicant where the application does not meet requirements (4) The Service shall evaluate applications that meet the minimum requirements and issue a registration certificate in Form VPS 2B for qualifying registered grafting service providers (5) The Service shall notify and give reasons to applicants whose applications do not meet the minimum requirements (6)A registered grafting service provider shall be required to submit to the Service quarterly returns on the quantities and types of grafting and other vegetatively propagating seed processing done 7)The Service shall; (a) Maintain a record of registered grafting service providers (b) Publish a list of registered and deregistered grafting service providers.

	(8) Any person who offers commercial grafting of Vegetatively Propagating Seed services without a registration Certificate issued in accordance with this regulation commits an offence.
Registration of sellers of vegetatively propagating seed	7. (1) A person shall not sell Vegetatively Propagating Seed without a valid Vegetatively Propagating Seed producer's or seller's registration Certificate (2) Any person who intends to sell Vegetatively Propagating Seed shall apply to the Service for a Vegetatively Propagating Seed seller's registration certificate in Form VPS 3A set out in the Third Schedule and shall be accompanied with the appropriate fee prescribed in the Fourth Schedule (3) The Service shall; (a) within 5 days acknowledge receipt of an application in 7 (2) (b) evaluate applications within 14 days from the date of acknowledgement to verify compliance to the requirements (c) register and issue a certificate of registration within 30 days from the date of acknowledgement where the applicant has met requirements specified in the Fifth Schedule and paid registration fee specified in the Fourth Schedule (d) within 21 days from the date of acknowledgement of receipt of application, notify the applicant where the application does not meet requirements (4) Applicants who meet requirements and are registered under sub regulation (3)(c), shall be issued with a certificate in Form VPS 3B as provided for in the Third Schedule (5) The certificate issued under sub-regulation 4 shall prescribe the conditions under which the seller shall operate. (6) The inspector shall in writing notify the seller where non-compliance has been noted. (7) The Service shall establish and maintain a register of Vegetatively Propagating Seed sellers registered under (3)(b); (8) The Service shall ensure that the Register in 7 is accessible to the public (9) A person who contravenes the provisions of paragraphs 1 of this regulation commits an offence.

National County based List of Approved Farmer Varieties	8. (1) There shall be a National County-based List of Approved Farmer Varieties which shall be developed and maintained by the Service in accordance with Part A and Part B of the Tenth Schedule (2) National County-based List of Approved Farmer Varieties shall be used for the production and sale of Quality Declared Standard Seeds. (3) A registered producer in a County shall only use for seed production, varieties listed in respect of the county or neighbouring counties drawn from the National County-based List of Approved Farmer Varieties (4) The List under sub-regulation (1) shall not include varieties listed under the National Variety List as provided in Section 8A of the Act and the Variety Evaluation and Release Regulations. (5) Any person who intends to have a plant variety for Vegetatively Propagating Seed entered in the List in sub-regulation (2) shall (a) apply to the Service for the listing of the variety in Form VPS 4(A) set out in the Third Schedule (6) The Service shall, after consultation, with users of plant varieties and the County Executive Committee Member in the respective County, and upon assessing the application for in sub-regulation 5 communicate the decision in Form 4B of the Third Schedule on; (a) Letter of approval for listing and use for qualifying applications; or (b) Letter of Rejection for listing and use for application that don't meet the requirements set out in sub-regulation (4) giving reasons for failure to grant approval. (7) The Service shall list the variety under Sub-regulation (6) (a) in the National County-based List of Approved Farmer Varieties. (8) The Service shall keep and maintain the National County-based List of Approved Farmer Varieties established in 8(1); (9) The Service shall make accessible to the public, the National County-based List of Approved Farmer Varieties set out in 8(8);

	(10) A person who intends to remove, correct or withdraw a variety shall apply for the same in Form VPS 4C in the Third Schedule; (11) The Service shall notify the applicant in 8(10) of the confirmation of amendment in Form VPS 4D in the Third Schedule; (12) The Service may delist a plant variety where the conditions stated for registration have not been complied with; (12) Any person who sells seeds of a Vegetatively Propagating Seed variety not in the List commits an offence.
Renewal of Certificates	9. The certificate issued under this Part shall be effective from the 1st January and expire on 31st December every year, and may be renewed upon compliance with the conditions in the Certificate in VPS Form 1B, Form 2B and Form 3B and payment of fees set out in the Fourth Schedule.
Suspension and Revocation of certificates	10. (1) The Service may suspend or revoke a certificate issued under this Part where a registered person does not comply with the prescribed conditions or any other regulations; (2) Where the Service intends to suspend a certificate of registration, it shall notify the holder of the registration certificate in writing, outlining the non-compliance and the measures that need to be undertaken within a specified time period depending on the degree of non-compliance as prescribed by the Service; (3) A holder of a registration certificate who does not fully comply with the measures required to be undertaken in the notice issued under Sub-regulation (2) or demonstrate partial compliance and effort to complete compliance, shall have the registration certificate suspended and be required to finalize measures for compliance within a specified period; (4) The Service shall revoke a certificate which has been suspended where a holder does not comply with the measures specified in sub-regulation (3); (5) Any person whose certificate of registration has been revoked may appeal in accordance with Regulation 31; (6) The Service shall ensure that the list of Seed Producers, Sellers and Grafting Service Providers whose registration certificates have been suspended or revoked is accessible to the public;

	(7) Any person who operates while his registration certificate has been suspended or revoked commits an offence;
PART III: QUALITY ASSURANCE	
Prescribed seeds	11. (1) The vegetatively propagating seeds of plant species listed in the First Schedule shall be prescribed seeds for purposes of these Regulations. (2) Without prejudice to sub-regulation (1), the Cabinet Secretary may, in consultation with the Service and by notice in the Kenya Gazette, amend the First Schedule to these Regulations subject to approval by parliament.
Seed Testing Station	12. (1) The Seed Testing Stations established under Section 11 of the Act by the Service shall be the official Seed Testing Stations for the purposes of these Regulations; (2) The Service may approve testing of Vegetatively Propagating Seed to be done in the field provided that the testing is affiliated to the Seed Testing Station established in (1)
Certification and declaration of seeds	13. (1) All prescribed seeds of plant species listed in the First Schedule shall be eligible for certification. (2) Seeds of plant species in the Second Schedule shall be certified based on standards in the Seventh Schedule (3) Varieties of crops for production of certified seeds must have an approved Distinctiveness, Uniformity and Stability (DUS) report and should be listed in National Variety List (4) Varieties of crops for production of Quality Declared Standard Seeds shall be from National County-based List of Approved Farmer Varieties or the National Variety List (5) Seed shall be certified in seven classes as set out in the Sixth Schedule. (6) Quality Declared Standard Seed shall be the eighth class as set out in the Sixth Schedule
Authorization	14. (1) The Service may, pursuant to Section 3B of the Act authorize some or all aspects of seed certification to private or public persons in accordance with the instruments of authorization prescribed by the Service and any corresponding fee shall be paid to the authorized persons.

	(2) County Executive Committee Member responsible for agriculture may nominate qualified persons for authorization by the Service. (3) The nominated persons shall have the following minimum qualifications: - (a) Diploma in Agriculture, Biotechnology, Entomology, Crop Protection, Applied Biology, Seed Science, Horticulture or its equivalent from an institution recognized in Kenya; (b) Employees of the county with at least two years of field experience in crops.
Variety and seed source maintenance	15.(1) A Maintainer of a variety for production of certified seed shall maintain the standards of pre-basic and higher classes of the variety approved for certification prescribed in the First Schedule. (2) A Maintainer of a variety under the National County-based List of Approved Farmer Varieties for production shall maintain the seed source in accordance to guidelines in the Ninth Schedule.
Order for maintenance and propagation of crop varieties and seed sources	16. (1) Where seed for a prescribed vegetatively propagating plant species is not available but is important for food security or any other socio-economic value, the Cabinet Secretary may in consultation with the County Governments and other relevant stakeholders, with approval from Parliament, issue an order for the maintenance and propagation of such plant species which are unavailable. (2) An order issued under (1) shall provide for; (i) The roles of various parties, who may be public or private actors, to undertake the maintenance, propagation and availing of the seed; (ii) The ensuring of certification requirements as provided in Regulation 12 or exclusions from requirements granted under the Act; (iii)The resources and means for enforcing the order (3) In case of natural disasters such as floods, drought or outbreaks of disease, the seed classes and prescribed standards may be waived by the Cabinet Secretary in consultation with the Service.
Inspection of Source of Vegetatively Propagating Seed	17.(1) A registered producer of Vegetatively Propagating Seed shall apply for inspection of the source to the Service in Form 5A and pay fees prescribed in the Fourth Schedule. (2) The inspector shall undertake an inspection of the seed source in 17(1), and issue a report to the applicant in sub-regulation 1 in Form 5B in the Third Schedule;

	(3) A Vegetatively Propagating Seed producer or a grafting service provider shall at any time only source rootstock, scion or any form of propagation material from inspected Sources. (4) Any person who sells seeds of a Vegetatively Propagating Seed produced with rootstock, scion or any form of propagation material from an uninspected source commits an offence.
Inspection of Vegetatively Propagating Seed production, Facilities and Fields	18. (1) Where a Producer intends to produce Vegetatively Propagating Seeds, the Producer shall apply to the Service for an inspection of the production Facility and or Field in Form VPS 6A prescribed in the Third Schedule and pay the fees prescribed in the Fourth Schedule. (2) Once the Facility or Field requirements are met as specified in the Seventh Schedule, the inspector will issue an inspection report in Form VPS 6B within 24 hours. (3) Where the report recommends further verification, the Inspector may sample propagation media or other plant material for testing as specified in specific seed crop requirements in Seventh Schedule and issue report in Form VPS 6B within 30 days from date of sampling. (4) No person shall produce Vegetatively Propagating Seed in a Facility or Field that has not been approved in sub regulation 2 and 3 above. (5) A person who contravenes sub regulation 1 and 4 commits an offence
Inspection of seedlings & Vegetatively Propagating Seed Crops	19. (1) The Producer shall, within a period specified in the Eighth Schedule, apply to the Service for inspection in Form VPS 7A in the Third Schedule and pay the fee prescribed in the Fourth Schedule. (2) An inspector shall conduct an inspection of Vegetatively Propagating Seed crops or seedlings for purposes of certification and such inspection shall be confined to approved facilities or seed fields as provided in regulation 18. (3) The result of each Vegetatively Propagating Seed crop inspection shall be issued in Form VPS 7B or in Form VPS 7B1 in case of seedlings, in the Third Schedule to the registered seed producer within twenty-four hours. (4) Upon completion of an inspection, the Inspector shall accord any Vegetatively Propagating Seed crop or seedling meeting the prescribed standards the appropriate class. (5) Any Vegetatively Propagating Seed crop or seedlings which do not meet requirements specified in the Seventh Schedule shall be rejected and disposed off as per Regulation 27.

	(6) Where a registered Seed Producer is aggrieved with the results of any Vegetatively Propagating Seed crop or seedling inspection in sub regulation 5, he may appeal in writing within two days upon receipt of the report to the Director, for re-inspection upon payment of the prescribed fee. (7) The Director upon receipt of an appeal in (6) shall consider the appeal and may order for a re-inspection to be conducted within a period not exceeding 14 days by a team comprising of; (a) one senior seed inspector; (mandatory) (b) and any two of the persons listed in (i),(ii) or (iii) (i) a representative of the aggrieved Vegetatively Propagating Seed Producer; or (ii) one breeder of the specific crop in question or his representative; or (iii)one County Agricultural Extension Officer. (8) where upon a re-inspection the Vegetatively Propagating Seed crop or seedling is approved, the aggrieved Vegetatively Propagating Seed producer shall not be charged for re-inspection. (9) In the case of production of quality declared standard seed; (a) the provisions of sub regulations 1 to 8 shall not apply; and, (b) The producer shall comply with standards provided in the Seventh Schedule, (c) the Service or authorized persons shall undertake regular monitoring inspection of Vegetatively Propagating Seed crop based on the procedure to be developed by the Service from time to time.
Testing of vegetatively propagating seed.	20.(1) The producer shall request the Service for sampling and testing in Form VPS 8A set out in the Third Schedule (2) The seed inspector shall within 14 days from the date of application draw an official sample and immediately submit to a testing station together with an application requesting for sampling or testing of Vegetatively Propagating Seed. (3) The Seed Analyst shall ─ (a) test Vegetatively Propagating Seeds as per specific crop requirements; (b) issue the results of the Seed test on the seed testing certificate in Form VPS 8B set out in the Third Schedule; (c) where the test results do not meet minimum requirement, the analyst shall indicate the note 'Not for Sale' in 3(b) and issue stop sale order for the lot.

	(4). Any person who sells rejected seed under 3(c) commits an offence (5). Where a Vegetatively Propagating Seed producer disagrees with the test results, he may appeal to the Service in writing within two days upon receipt of the report for retesting upon payment of the prescribed fee. (6) The Service upon receipt of an appeal in (5) shall consider the appeal and may order for a re-testing to be carried out within 2 days by a team comprising of: (a) one senior seed analyst/ technologist; (mandatory) (b) one representative of the applicant, (c) more representatives appointed by the applicant at own cost (7) A repeat test in (5) shall be done in accordance to 20(2)(a) on the retained sample upon payment of the fee prescribed in the Fourth Schedule by the VPS producer (8) where upon a re-testing the VPS is approved, the aggrieved VPS producer shall not be charged a fee; (9) In case of Quality Declared Standard Seed, Vegetatively Propagating Seed testing by the Service or authorized persons shall be based on monitoring reports where pathogens, weeds, and pests are suspected.
Treatment of vegetatively propagating seed	21.(1) A Seed Producer may apply treatment to prepare Vegetatively propagating seed for sale in Regulation 22 to disinfect, disinfest or protect seed from pest and diseases (2). Where seed treatment has been applied in sub regulation 1 above; (a) The seed producer shall provide information to Service on procedure and treatment applied; (b) Where the treatment applied in sub regulation 2(a) is a Pest Control Product, it shall be those approved by the Pest Control Products Board. (c) The seed producer shall ensure a visible warning text is on the seed packaging material.
Inspection of lots, preparation and sampling	22. (1) Vegetatively Propagating Seed shall only be prepared by registered Vegetatively Propagating Seed Producers. (2) Registered Vegetatively Propagating Seed Producers shall prepare only Vegetatively Propagating Seeds that have met the minimum requirements set in Seventh Schedule provided that in the case of imported Vegetatively Propagating Seeds, preparation shall be only on those complying with Regulation 24.

	(3) Vegetatively Propagating Seeds of the same origin, species, class and variety from different facilities or fields, which have passed inspection may be bulked to constitute one seed lot as prescribed for applicable specific crops in the Seventh Schedule. (4) The Vegetatively Propagating Seed Producer shall; (a) in the case of certified seed, notify the Service, at least 7 days before the date of preparation, using Form VPS 9A in the Third Schedule on the intention to prepare Vegetatively Propagating Seeds. (b) in the case of Quality Declared Standard Seed, notify the Service within seven days after the date of preparation, using Form VPS 9B in the Third Schedule. (5) The inspector shall upon receipt of notification in (4)(a), schedule and conduct a lot examination, and may order repeat of preparation where preparation is ineffective. (6) Preparation of Vegetatively Propagating Seed; (a) of Certified Seed, the seed shall meet the preparation standards set out in the Seventh Schedule and the results entered in Form VPS 9C set out in the Third Schedule. (b) of Quality Declared Standard Seed, shall comply with the preparation standards in the Seventh Schedule (7) Any prepared seed shall be properly marked and stored separately in identifiable lots (8) The VPS producer shall pay the sampling lot examination fees prescribed in the Fourth Schedule. (9) All prepared lots shall be sampled and the sample shall be provided at no cost to the Service for purposes of post control planting and examination (10) Vegetatively Propagating Seed Lots with Unique reference number shall be created at the time of sampling and shall not exceed the maximum quantity as prescribed in the Seventh Schedule. (11) The producer shall dispose any rejected seed crops and seed lots in accordance with regulation 27
Packaging, labeling and sealing	23. (1) It shall be the responsibility of the Producer to notify the Service of the intention to have packaging, labeling and sealing of VPS done in Form VPS 10A as prescribed in the Third Schedule (2) The producer shall use packaging materials based on standards provided in the Seventh Schedule and,

	(a) upon execution of lot examination as per 22(5), an inspector shall facilitate labeling of the Vegetatively Propagating Seed lots in accordance with label specifications in 22 (3) in the production of certified seed and capture label serial number in Form 10 A; or (b) in the case of Quality Declared Standard Seed, the Seed Producer shall attach a label to read '*These Vegetatively Propagating Seed are marketed having met Quality Declared Standard*'. (3) The certification label referred to in paragraph 2(a) shall specify the– (a) seed class; (b) species and variety of Vegetatively Propagating Seed (c) lot number; (d) Label Serial number (e) date of harvest; (f) date of labeling (g) weight or number of Vegetatively Propagating Seeds (h) warning text in cases where the seed is treated. (4) The Seed producer shall pay the appropriate for labeling and sealing prescribed in the Fourth Schedule. (5) The provision relating to labeling in sub regulation (1),(3) shall not apply in a case where VPS (corm, cutting, layer, marcott, root, runner, scion, set, split, stem, stock, stump, sucker, plantlet) are detached or cut as parts from an approved or tested seed crop for sale unless they are to be used for further multiplication. (6) A person, other than the ultimate user, shall not, remove or tamper with labels, seals or open sewn or closed packages of Vegetatively Propagating Seed. (7) A registered Seed Producer shall be obliged to call an inspector to re-inspect seed lots whose validity of certification has expired. (8) A person who contravenes the provisions of sub-regulation 6 commits an offence.
Transportation of Vegetatively Propagating Seed	24.(1) Under the production of Certified Seed, a Seed Producer may not transfer or distribute Vegetative Propagating Seed from the registered field to registered producer facility unless provisions of 19 and 20 have been met.

	(2) It is the responsibility of the Vegetatively Propagating Seed producer/seller to ensure protection of certified Vegetatively Propagating Seed from damage, contamination and infection at transportation and handling. (3) Handling of certified Vegetatively Propagating Seed shall be based on guidelines as prescribed in the Seventh Schedule.
Validity of certification of VPS.	25. (1) The validity period of certification for Vegetatively Propagating Seeds shall be as specified in Eleventh Schedule (2) A Seed producer shall notify the Service to re-inspect Vegetatively Propagating Seed lots whose validity of certification has expired. (3) An Inspector shall re-inspect and may re-sample Vegetatively Propagating Seed for re-testing. (4) Where the Vegetatively Propagating Seed in (3) has met the requirements for re – Certification, the Vegetatively Propagating Seed shall be issued with a new Certificate. (5) This regulation shall only apply to Certified Seed.
Sale of Vegetatively Propagating Seed	26. (1) A person shall not offer for sale Vegetatively Propagating Seed of species set out in the First Schedule unless it is certified seed or quality declared standard seed. (2) No person shall offer Vegetatively Propagating Seed for sale without a valid registration certificate issued under this regulation (3) Every registered Seed producer and seed seller shall establish an appropriate system and facilities to maintain the quality of the Vegetatively Propagating Seed offered for sale. (4) Pursuant to the provisions of regulation 20, a Seed producer and seller shall be responsible for the quality of any Vegetatively Propagating Seed he offers for sale. (5) A Seed producer or Seed seller must demonstrate evidence of the Vegetatively Propagating Seed having been Certified Seed or Quality Declared Standard Seed. (6 a) Every Seed producer or Seed seller shall maintain a record of Vegetatively Propagating Seed sold, which they shall make available to the Service quarterly and on demand.

	(b) Every Seed seller shall maintain records of sales to consumers and purchases from a registered Seed producer and provide proof of purchase to consumers and make available to the Service quarterly or on demand. (7) A seed inspector may enter and inspect any facility where Vegetatively Propagating Seed are handled. (8) An inspector may at any time, conduct checks of all Vegetatively Propagating Seed handling facilities and shall issue an order to stop sale in Form VPS 11 in the Third Schedule in respect of seed lots whose quality is below the minimum standards prescribed in the Seventh schedule. (9) Where an order to stop sale under sub regulation (8) is issued, the Seed producer or seller, shall retrieve and dispose of such Vegetatively Propagating Seed in accordance with regulation 27. (10) A Seed producer shall supply seed for sale only to Seed sellers registered by the Service. (11) Every Seed Producer shall issue the purchaser with proof of purchase to show that the Vegetatively Propagating Seed was purchased from him. (12) A person who contravenes the provisions of sub regulation (1), (2), (3), (4), (5), (6), (9), (10) and (11) commits an offence.
Seizure and disposal of Vegetative Propagating Seeds and Vegetative Propagating Seeds' processing facilities.	27.(1) The Seizure and Disposal of Vegetatively Propagating Seed and Vegetatively Propagating Seed processing facilities shall be subject to the provisions of Section 3D of the Act. (2) The Seed producer shall dispose the rejected lots in accordance with the procedure prescribed in Form VPS 12A and Form VPS 12B. (3) A person who contravenes the provisions of this regulation commits an offence.
Pre and post control plots.	28**.** (1) Seed lots officially sampled and tested under these Regulations shall be grown by the Service or the Seed producer in pre- or post-control plots and such plots shall be open to examination and assessment by all interested parties. (2) The Service may draw official seed sample to be grown by the Service for pre- or post-control plots for the Quality Declared Standard Seeds for pre- and post-control monitoring. (3) The Pre and post- control plots in sub regulation 1 and 2 shall be conducted as per guidelines issued by the Service.

	(4) Upon completion of the examination and assessment of pre- or post-control plots, the Service shall– (a) write a report on the number of off-types, foreign cultivars, diseased plants and other variations observed in the plots; (b) investigate the sources of the variations and possible remedies to eradicate such variation in subsequent seasons; and (c) Institute remedial measures that may include and not limited to Stop sale order or stop further use of material for multiplication of affected lots.
Vegetatively Propagating Seeds importation and exportation. LN.No.220 of 2016 LN.No.215 of 2016 CAP 324	29. (1) A person who wishes to import or export Vegetatively Propagating Seeds shall meet the requirement for importation or exportation of seeds as provided for in Regulation 23 (1) (a) (c), (2) and (3) of the Seeds and Plant Varieties (Seeds) Regulations, 2016 (2) Vegetatively Propagating Seeds intended for import shall comply with the following; (a) minimum standards set out in the Seventh Schedule, (b) meet the requirements of the Seeds and Plant Varieties (Variety Evaluation and Release) Regulations where applicable, (c) be accompanied by a Phytosanitary Certificate and; (d) meet the Kenyan quarantine requirements as provided in the Plant Protection Act (CAP 324)). (3) Any Vegetatively Propagating Seed importer who contravenes this regulation leading to introduction of new pests and diseases shall be liable for the economic losses experienced by the farmers and the industry (4) The provisions of Sub regulation (1), (2), (b) shall not apply to importation of materials intended for germplasm collections and research materials. (5) Quantities of Vegetatively Propagating Seeds imported for germplasm collections and research shall be limited to a maximum quantity approved by the Service on a case by case basis taking into account the seed rate and purpose of importation. (6) Vegetatively Propagating Seeds imported under these Regulations shall not be sold unless its quality has been examined, tested according to Regulation 20 and the importer has been given a unique seed lot number for the consignment. (7) The sale of imported seed shall be subject to the provisions of regulations 20, 22, 23 and 25

	(8) The Service shall regulate the certification of imported seed lots or restrict the importation of any crop species and variety of Vegetatively Propagating Seeds in accordance with these Regulations. (9) In case of unanticipated Vegetatively Propagating Seeds shortages as advised by the Service, the Cabinet Secretary may restrict export of Vegetatively Propagating Seeds for a specified period not exceeding twelve months for food security reasons. (10) All Vegetatively Propagating Seeds for export shall meet the minimum Kenyan standards set out in the Seventh Schedule and those of the importing country. (11) Any person who contravenes the provisions of this regulation commits an offence
PART IV: GENERAL PROVISIONS	
Records	30. (1) Every registered Vegetatively Propagating Seed producer shall – (a) record such particulars of each seed lot of certified seed produced, purchased, sold or otherwise dealt with by him as may from time to time be prescribed; (b) keep such records in safe custody for a period of not less than three years from the date of the transaction to which the records relate; (c) produce such records to any inspector for inspection whenever required during normal working hours; (2) The Records in sub regulation 1 shall be in Form VPS 13
Appeals.	31. (1)(a) Any person aggrieved by a decision of an inspector or analyst, under these regulations may appeal in writing to the Director of the Service within one week (b) The Director of the Service shall give a response to (1)(a) within fourteen days (2) (a)Any person aggrieved by the decision of the Director of the Service may appeal in writing to the Seeds Regulations Committee within one month. (b) The Committee shall give a response to (2)(a) within ninety days (3) Any person aggrieved by a decision of the Seeds Regulation Committee may appeal to the Seeds and Plant Tribunal in line with the tribunal procedures.
Offences and penalties.	32. A person who contravenes any of the provisions of these Regulations for which no specific penalty has been provided commits an offence and shall be liable to a fine of not exceeding Kenya Shillings twenty thousand or a jail sentence not exceeding six months or both.

Protection from liability.	33. (1) No legal proceedings shall lie against any officer for anything done bona fide and without negligence, in the exercise of their powers or the performance of their functions or duties under these Regulations.
	(2) For the purpose of this Regulation, the term "officer" refers to any employee of the Kenya Government or officers in the gazette in accordance to Section 3 of the Act.

FIRST SCHEDULE,
PRESCRIBED VPS r(11), (13))

Category	**Common name**	**Scientific name**
Root and Tuber crops	Potato	*Solanum tuberosum L*
	Sweet potato	*Ipomea batatas*
	Cassava	*Manihot esculenta*
	Arrow roots	*Colocasia esculenta*
Oil and nut crops	Cashew nut	*Anacardium occidentale*
	Macadamia nuts	*Macadamia sp.*
	Oil-palm	*Elaeis quineensis*
	Coconut	*Cocos nucifera*
Sugar Crop	Sugar cane	*Saccharum spp.*
Medicinal herbs, spices and aromatic plants	Pyrethrum	*Tanacetum cinerariifolium*
	Clove	*Syzygium aromaticum*
	Ginger	*Zingiber officinale*
	Hyssop	*Hyssopus officinalis*
	Lavender	*Lavandula species*
	Lemon Balm	*Melissa officinalis*
	Lemon grass	*Cymbopogon citratus*
	Paprika	*Capsicum annuum*
	Parsley	*Petroselinum crispum*
	Peppermint	*Mentha piperita*
	Rosemary	*Salvia rosmarinus*
	Savory	*Satureja hortensis; S.montana*
	Sesame	*Sesamum indicum*
	Spearmint	*Mentha spicata*

	Turmeric	*Curcuma longa*
	Vanilla	*Vanilla planifolia; V. tahitensis*
	Tea Tree	*Melaleuca alternifolia*
	Aloe Vera	*Aloe spp*
	Chamomile	*Matricaria chamomilla*
	Miraa (Khat)	*Catha edulis*
	Climbing Shrub	*Tinosphora caffra*
Beverage crops	Tea	*Camelia sinensis*
	Coffee	*Coffea robusta/ Coffea Arabica*
	Cocoa	*Theobroma cacao*
	Mate	*Ilex paraqueriensis*
Fruit trees	Avocado	*Persea Americana*
	Mango	*Mangifera indica*
	Bananas and plantains	*Musa spp.*
	Pineapple	*Ananus comosus*
	Citrus	*Citrus spp*
	Apple	*Pyrus malus L*
	Passion fruit	*Passiflora edulis*
	Pear	*Pyrus communis L.*
	Peach	*Prunus persica L.*
	Quince	*Cydonia oblonga*
	Plum	*Prunus domestica L.*
	Loquat	*Eriobotrya caponica*
	Cape gooseberry	*Physalis peruviana*
	Mulberries	*Morus spp.*
	Berries	*Rubus sp*
	Custard apple	*Annona sp.*
	Straw Berries	*Fragaria vesca Fragaria chiloensis*
	Tree tomatoes	*Tomarillo spp. Solanum betaceum*
	White sapote	*Casimiroa edulis*
	Bixa	*Bixa Orellana*
	Grapes	*Vitis vinifera*
	Pixie Oranges (tangerines	*Citrus reticulate*

	Pomegranate	*Punica granatum*
Grasses	Napier grass or Elephant grass	*Pennisetum purpureum K. Schum* *Cenchrus purpureus*
	Ornamental grass	*Pennisetum clandestinum (Kikuyu grass)*
	Brachiaria spp	*Brachiaria decumbens cv. Basilisk; Brachiaria brizantha cv. MG4;* *Brachiaria brizantha cv. Piata; Brachiaria brizantha cv. Xaraes; and Brachiaria hybrid cv. Mulatto II*
	Bent grasses	*Agrostis spp*
	Australian blue stem	*Bothriochloa bladhii*
	Hurricane grass	Bothriochloa pertusa
	Buffel grass	*Cenchrus ciliaris*
	Rhodes grass	*Chloris gayana*
	Horsetail grass	*Chloris roxburghiana*
	Bermuda grass	*Cynodon dactylon*
	Orchard grass	*Dactylis glomerata*
	Antelope grass	*Echinochloa pyramidalis*
	Bush rye	*Enteropogon macrostachyus*
	Bungoma grass	*Entolasia imbricate*
	Masai love grass	*Eragrostis superba*
	Fescues	*Fescues spp*
	Black spear grass	*Heteropogon contortus*
	Italian rye grass	*Lolium multiflorum*
	Perennial rye grass	*Lolium perenne*
	Guinea grass	*Panicum maximum*
	Carabao grass	*Paspalum dilatatum*
	African bristlegrass	*Setaria sphacelate*
	Kangaroo grass	*Themeda triandra*
Pasture Legume	Lablab	*Lablap purpureus*
	Alfalfa, Lucerne	*Medicago sativa*
	Sweet clovers	*Melilotus spp*
	Stylo	*Stylosanthes spp*
	Vetches	*Vicia spp*
	Leucaena	*Leucaena leucocephala*
	Butterfly pea	*Centrosema pubescens*

SECOND SCHEDULE (r.13)

VPS Crops for Production of Certified or qdds

Category	**Common name**	**Scientific name**
Root and Tuber crops	Cassava	*Manihot esculenta*
	Potato	*Solanum tuberosum L*
	Sweet potato	*Ipomea batatas*
Oil and nut crops	Cashew nut	*Anacardium occidentale*
	Coconut	*Cocos nucifera*
	Macadamia nuts	*Macadamia sp.*
	Oil-palm	*Elaeis quineensis*
Sugar Crop	Sugar cane	*Saccharum spp.*
Medicinal, herbs, spices and aromatic plants	Pyrethrum	*Tanacetum cinerariifolium*
	Miraa (Khat)	*Catha edulis*
	Lemon grass	*Cymbopogon citratus*
Beverage crops	Tea	*Camelia sinensis*
	Coffee	*Coffea robusta/ Coffea arabica*
Fruit trees	Apple	*Pyrus malus L*
	Avocado	*Persea Americana*
	Bananas and plantains	*Musa spp*
	Citrus	*Citrus spp*
	Mango	*Mangifera indica*
	Passion fruit	*Passiflora edulis*
	Pineapple	*Ananus comosus*
	Straw berries	*Fragaria vesca Fragaria chiloensis*
Grasses	Brachiaria	*Brachiaria decumbens cv. Basilisk; Brachiaria brizantha cv. MG4;* *Brachiaria brizantha cv. Piata; Brachiaria brizantha cv. Xaraes; and Brachiaria hybrid cv. Mulatto II*
	Napier grass or Elephant grass	*Cenchrus purpureus, synonym Pennisetum purpureum,*
	Ornamental grasses (Kikuyu grass)	*Pennisetum clandestinum*

THIRD SCHEDULE

FORMS

FORM VPS 1A (r. 5(2))

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
APPLICATION FOR REGISTRATION AS A VPS PRODUCER

To:

The Managing Director
Kenya Plant Health Inspectorate Service
P.O. Box 49592- 00100
NAIROBI, KENYA

1). I /We, hereby apply to be registered as a VPS producer under the Name……..
……
Postal Address ……Telephone Number ……
Location of the premises ……..……

2). I /We, wish to be registered in the following category:

CATEGORY	Please tick where applicable ✓
Small scale Producer	
Medium scale Producer	
Seed Merchant (Large scale producer/Tissue Culture Lab)	

(See Fourth Schedule & attach copies of relevant documents)

3). List the Vegetatively Propagating Seed you would wish to deal in (*Please add as appropriate*).

a) ……..
b) ……..
c) ……..
d) ……..
e) ……..
f) ……..

4). I. **Production**

NATURE OF PRODUCTION FACILITY	Please tick as appropriate ✓
Tissue culture lab Green house/ Screen house	
Nursery	
Open field	
Any other (specify)	

(3) Do you have adequate and knowledgeable personnel who are conversant with VPS seed matters of interest……..Yes/No

(4) Do you have adequate land and facilities to handle VPS ? Yes/No

(5) Do you have staff who are knowledgeable in VPS production & handling? Yes/No

II) Processing/Preparation/Handling

(1) Do you have necessary facilities/tools/equipment necessary to process VPS? Yes/No

(2) Do you have adequate suitable storage space? Yes/No 3) Do you have a capacity to print and label packets/containers? Yes/No

5). **Conditions**

i.	The VPS seed will be kept in a suitable store with adequate provisions to separate the various seed lots and sustain the quality of the seeds.
ii.	At any time, even without previous appointment, I/we will allow the inspector (s) entry to the seed fields/stores/facilities and thereby provide them/him/her with the facilities necessary to carry out the inspection work as laid down in VPS Seed Regulations.
iii.	I/we will avail a stock list of all VPS lots in our stores/fields/facilities and details of distributed seed lots to the service on request.

I/We, enclose evidence of payment of Kshs. …… for this application payable to the Managing Director, KEPHIS.

(See Fourth Schedule)

N.B.: The application for VPS producers of quality declared standard seed to be accompanied with county agricultural committee approval letter.

Declaration:

In signing this application, I/we also declare that I/we are conversant with and shall observe the various clauses and conditions of the VPS Regulations.

Date…….. Signature …….……

Note. (I) The Director shall inform the unsuccessful applicants and shall send back their cheque to them.

THIRD SCHEDULE-(*Contd.*)

FORM VPS 1B (r.5(5))

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
CERTIFICATE OF REGISTRATION AS A VPS PRODUCER

1). Producer Name……
Registration Certificate No. ……
For the Year …… Date of issue ……..…….
Postal …….. Address……Tel. No …….
Location of premises……

2). For the category of

CATEGORY	Please tick where applicable ✓
Small scale Producer	
Medium scale Producer	
Seed Merchant (Large scale producer/Tissue Culture Lab)	

(See Fourth Schedule & attach copies of relevant documents)

Registration Certificate is subject to the following conditions.
A Registered VPS producer shall ensure that:-

i.	It always meets minimum registration requirements as specified in the VPS regulation
ii.	At any time will allow the inspector (s) entry to the producers' premise (s) and provide him/them with the facilities/conditions necessary to carry out the inspection work
iii.	The seed will be kept in a suitable fields/store/facilities with adequate provisions to separate the various seed lots and sustain the quality of the seeds.
iv.	The certificate may be withdrawn/cancelled if the VPS producer contravenes the provisions of the Act and the VPS Regulations
v.	The registration certificate is displayed at all times in the premise
vi.	The license is renewed upon expiry.

Note: - If the VPS producer does not engage in production for three years the registration may be withdrawn

Signature_____Date _____
Managing Director

THIRD SCHEDULE-(*Contd*.)

FORM VPS 1C (r. 5(7))

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
MERCHANTS INTENTION FOR REGISTRATION AS A VPS PRODUCER

To:

The Managing Director
Kenya Plant Health Inspectorate Service
P.O. Box 49592- 00100
NAIROBI, KENYA

1) I /We hereby apply to be registered as a VPS producer under the

Name ……
Postal Address ……Telephone Number ……
Location of the premises ……
Seed merchants registration No. under the Seeds Regulations (2016)……

2) I /We wish to deal in: (i) Production (ii)Processing/preparation (iii) Marketing

CATEGORY of OPERATION	Please tick where applicable ✓
Production	
Processing/ Preparation	
Marketing	

3) List the VPS you would wish to deal in.

i. ……
ii. ……
iii. ……
iv. ……
v. ……
vi. ……

Production

4) Do you have adequate and knowledgeable personnel who are conversant with VPS seed matters of interest? Yes/No

5) Do you have adequate land and facilities to handle VPS basic seed? Yes/No

(i) Do you have contractual agreement with growers you have recruited? Yes/No

(ii)Do you have adequate field officers to supervise and advise growers on all operations of VPS production? Yes/No

Processing/Preparation

(i) Do you have necessary facilities/tools/equipment necessary to process VPS? Yes/No
(ii) Do you have adequate suitable storage space? Yes/No

(iii) Do you have a capacity to print and label packets/containers? Yes/No

Marketing

(i) Do you have an appropriate distribution system? Yes/No
(ii) Do you have registered VPS sellers? Yes/No
(iii)Do your seed sellers have an agreement with you for distributing seed on your behalf? Yes/No
(v)Do they have adequate understanding and knowledge of handling VPS? Yes/No
(vi) Do they have adequate storage facilities Yes/No
(vii)Do they understand that VPS are bulky, perishable, living and should not contaminated? Yes/No
(viii)Do they understand that different VPS lots should not be mixed? Yes/No

Conditions

i.	The VPM seed will be kept in a suitable store with adequate provisions to separate the various seed lots and sustain the quality of the seeds.
ii.	At any time during official working hours, even without previous appointment, I/we will allow the inspector (s) entry to the seed fields/stores/facilities and thereby provide them/him/her with the facilities necessary to carry out the inspection work as laid down in VPS Seed Regulations.
iii.	I/we will avail a stock list of all VPS lots in our stores/fields/facilities and details of distributed seed lots to the service on request.

Declaration:

In signing this application, I/we also declare that I/we are conversant with and shall observe the various clauses and conditions of the VPS Regulations.

Date…… Signature……..……

Note. The Director, shall inform the unsuccessful applicants and shall send back their cheque to them.

THIRD SCHEDULE-(*Contd*.)

FORM VPS 2A (r. 6(2))

REPUBLIC OF KENYA

KENYA PLANT HEALTH INSPECTORATE SERVICE

APPLICATION FOR REGISTRATION AS A GRAFTING SERVICE PROVIDER OF VPS

To:

The Managing Director
Kenya Plant Health Inspectorate Service
P.O. Box 49592- 00100
NAIROBI, KENYA

1). Applicant Particulars

Applicant /Business Name (*attach registration Certificate*) ……
Address …… Tel. No…… Email……..……..……..

I hereby apply for a Registration as a grafting service provider of VPS in ……County Sub County …….Ward …… Sub-location ……. Town/Market/Street…….. Physical Location …….

2). List the crops you would wish to deal in (*for example, pixie oranges, mangoes etc*)

a) …….
b) …….
c) …….
d) …….

3) Key requirements

i. Do you have adequate basic skills in handling, processing and grafting VPS? Yes/No
ii. Do you have VPS grafting tools and equipment? Yes/No
iii. Do you have storage equipment for VPS grafting parts?
iv. Have you ever worked with a registered VPS producer on grafting of VPS? Yes/No
(Attach proof if yes for number i and iv above)

4) (i)List VPS producers to source VPS from (Give Name, Registration # and Types of VPS)

a) …….
b) …….
c) …….
d) …….

(ii)Do you have an agreement with Registered VPS producer/source to use their inspected scions? Yes/No (*Attach proof if 'Yes')*

Enclosed proof of fee payment in respect of the application: ……..

Declaration:
In signing this application, I/We, also declare that I/We, are conversant with and shall observe the various clauses and conditions of the VPS Regulations.

Date……... Signature ……..……

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Endorsement by the County Office County Executive Committee Member (Crops)

KEPHIS

Application received on ……

Premises inspected by: ……..

Decision Approved ☐ Rejected ☐

Remarks: ……

Certificate No. ……..

Date: ……Signature ……..

For: **MANAGING DIRECTOR**

THIRD SCHEDULE-(*Contd.*)

FORM VPS 2B r 6 (3)

REPUBLIC OF KENYA

KENYA PLANT HEALTH INSPECTORATE SERVICE

CERTIFICATE FOR REGISTRATION AS A GRAFTING SERVICE PROVIDER OF VPS

Name…… Year ……
Registration Certificate No. …….
Date of issue……..
Postal Address…….. Tel. No..……. Email ……
County……. Sub County…… Ward……
Sublocation……. Town/Market/Street ……
Physical Location ……..

Certificate is subject to the following conditions:

A registered grafting service provider of VPS shall ensure that: -

Minimum registration requirements are met as specified in the VPS regulations at all times
At any time, allow the inspector (s) entry to their operation areas and provide him/them with the facilities/conditions necessary to carry out the inspection work
The VPS will be kept in a suitable handling/storage equipment to sustain the quality
The registration certificate is displayed at all times in the physical location of operation
Upon expiry, renew the license.

Signature _____ Date _____

Managing Director

THIRD SCHEDULE-(*Contd*.)

FORM VPS 3A (r. 7(2))

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
APPLICATION FOR REGISTRATION AS A VPS SELLER

To:

The Managing Director
Kenya Plant Health Inspectorate Service
P.O. Box 49592- 00100
NAIROBI, KENYA

1). Applicant particulars

Applicant /Business Name (*attach registration Certificate*) ……
Address …… Tel. No……Email……..…….……..

2). I hereby apply for a Registration as VPS Seller of Category Large/Medium/Small

CATEGORY of OPERATION	Please tick where applicable ✓
Large	
Medium	
Small	

3). County ……Sub county …….Ward ……
Sub-location ……. Town/Market/Street……..
Plot No…….

4). List the VPS you would wish to deal in.

a)…….
b) …….
c) …….
d) …….

i. Do you have adequate storage facilities Yes/No
ii. Do you understand that VPS are bulky, perishable, living and should not be contaminated? Yes/No
iii. Do you understand that different VPS lots should not be mixed?. Yes/No
iv. Do you have adequate understanding and knowledge of handling VPS? Yes/No

Attach proof if yes for number i and iv above

5). (i)List VPS producers to source seed from (Name/Registration no and Types of VPS)

a) …….
b) …….
c) …….
d) …….

(ii)Do you have an agreement with Registered VPS producer to sell seed on their behalf? Yes/No *attach proof if Yes*

6. Distribution
   i. Do you have an appropriate distribution (transport) system? Yes/No
   ii. Do you have other registered VPS sellers on distribution? Yes/No

7. Declaration:

In signing this application, I/We, also declare that I/We, are conversant with and shall observe the various clauses and conditions of the VPS Regulations.

Date……... Signature …….……

N.B: The application to be accompanied with County agricultural committee approval letter.

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Application received on ……

Premises inspected by: ……

Decision Approved ☐ Rejected ☐

Remarks: ……

……

Certificate No. ……..

Date: ……Signature ……..

For: MANAGING DIRECTOR

THIRD SCHEDULE-(*Contd*.)

FORM VPS 3B r7 (3)

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
CERTIFICATE FOR REGISTRATION AS A VPS SELLER

Name…… Year ……
Registration Certificate # …….
Date of issue……..
Postal Address…….. Tel. No..……. Email….……
County……. Sub County…… Ward……
Sublocation……. Town/Market/Street ……

Certificate is subject to the following conditions:
A Registered VPS seller shall ensure that: -

It meets minimum registration requirements as specified in the VPS regulation at all times
At any time will allow the inspector (s) entry to the seller' premise (s) and provide him/them with the facilities/conditions necessary to carry out the inspection work
The VPS will be kept in a suitable store/facility with adequate provisions to separate the various seed lots and sustain the quality of the seeds.
Display seed seller's Certificate at all times in the premise
Renew the license upon expiry

Signature _____ Date _____
Managing Director

THIRD SCHEDULE-(*Contd*.)

FORM VPS 4A **r (8(5)**

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
APPLICATION FOR LISTING OF A NEW VARIETY

1. Applicants Details
Name …… Address ……
Telephone …….. Email ……
Organization/Farmers Group/farmer …….
Location: County……Sub county……Ward……

2. Variety Details
a. Species

Scientific name (Botanical)	
Common name	
Proposed Denomination (Name)	
Farmer	

b. Group/Farmer/Breeder's reference/entry name ……

3. Purpose for application

Details	Tick as appropriate ✓
Variety registration	
Other (specify)	

4.Possible areas for production
(i) Indicate Agro-Ecological Zone (Specify County/Sub-County and Ward)

5. Variety Attributes
(i) Certified Seed

Variety attributes /Details	Tick as appropriate ✓
Yield	
Drought tolerance	
Pest resistance	
Disease tolerance/resistance	
Tolerance to extreme soil conditions (salinity, acidity,	
Other (specify)	

Note: Attach supportive documents and data/information

(ii) Quality Declared Standard Seed

Variety Attributes: ''Adaptability''	List as appropriate
Yield	
Drought tolerance	
Pest resistance	
Disease tolerance/resistance	
Tolerance to extreme soil conditions (salinity, acidity,	
Other (specify)	

***Note: Attach supportive documents and data/information/local seed selector's stories and narrative*/Video clips.**

6). Variety Characteristics (To be filled in a **characteristic form (descriptor)** specific for each crop)
Note: The form to include (Maturity duration, Size and average number of yield components and variety characteristics as specified by the form; attach photos)
Attach verifiable descriptor (Quality Declared Standard Seed) and consider support by research institution

7). Applicable to all applicants (vegetatively propagating seed for test)
(i) Quantity submitted (kg /Number) ……

(ii) Number of growing plants status at the applicant's premise ……..

8). Enclose proof of fee payment in respect of the application: ……..

9). Declaration
I hereby declare that, to the best of my knowledge, the information provided in this form is correct:

Name: ……..

Signature: ……

Date:…… Official Stamp: ……

THIRD SCHEDULE-(*Contd*.)

FORM VPS 4B r.8(6)

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
NOTIFICATION OF APPROVAL/DISAPPROVAL FOR LISTING INTO NATIONAL COUNTY BASED VARIETY LIST

This is to notify you Applicant Name ……. of APPROVAL/DISAPPROVAL for /from listing into national county-based variety list of variety particulars below

Variety (Common) name…… Botanical Name……

Denomination Name …… Source/Applicant(s)' Name:……

Address:……..…….. Telephone:……

Email ……

Official Use Only

_____

Name……. Position……...…

Date…… Signature…….

Official Stamp

Note: *This does not prevent other small registered producers from utilizing the variety for seed production*

THIRD SCHEDULE-(*Contd*.)

FORM VPS 4C r.8(10)

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
APPLICATION TO AMEND VARIETY DETAILS LIST

To:

The Managing Director
Kenya Plant Health Inspectorate Service
P.O. Box 49592- 00100
NAIROBI, KENYA

I/We, ……. Postal Address
…… Telephone # ……
Email address……hereby apply for (*tick as appropriate*)

Options	✓
Removal,	
Corrections,	
Withdrawals	

of the Registered variety (Botanical) name……
Common Name…… Denomination (Name……..

Reasons for requested amendments
1. …….
2. …….
3. …….

In case of correction specify
1. …….
2. …….
3. …….

Declaration:
In signing this application, I/We, also declare that I/We, are conversant with clauses and conditions of the VPS Regulations.

Name…… Date……. Signature ……..…….

Name…… Date…… Signature ……..……..……

Name…… Date……. Signature ……..……..……

Official stamp…….

For Official use

Received……Date……..…

Action by ……Date……...…….

Decision by……Date……..

THIRD SCHEDULE-(*Contd*.)

FORM VPS 4D r.8(11)

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
CONFIRMATION OF AMENDMENT OF VARIETY DETAIL LIST

To,

…… Postal Address ……

Telephone Number …… Email Address……

Your request for

Options	✓
Removal,	
Corrections,	
Withdrawals	

of the Registered variety (Botanical) Name……

Common Name ……

Denomination Name ……..…… has been effected/declined.

If positive, attach new certificate

If declined, reason(s), ……..

……

……

Name …….

Position ……

Date…….. Signature…….

Official Stamp

THIRD SCHEDULE-(*Contd*.)

FORM VPS 5A **r.17(1)**

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
APPLICATION FOR INSPECTION OF SEED SOURCE

Seed Source KEPHIS Registration Code …….....

To,
The Managing Director
Kenya Plant Health Inspectorate Service
P.O. Box 49592 00100
NAIROBI, KENYA

APPLICATION FOR SEED SOURCE INSPECTION

1. Seed Source Name: …….. Species……..
   Scientific(botanical) Name……... Common Name……...
   Source type……., Seed Variety Listing Reference……
2. Locality: County……. Ward……Sub-location……..……
3. Postal Address…….. Tel. No. …….. Email……..
4. Farm on which the seed source is being grown ……..…L/R. No. ……..
   GPS Location(optional) ……..……
5. Hectarage……. No of Fruit Trees (If applicable) …….
6. Approximate date of flower initiation…….. and fruiting period……..
7. Expected annual production……..……..……..
8. Name of authorized inspection entity to do inspection (if not KEPHIS) ……
   (*Attach agreement if applicable*).
9. The person who will be in charge daily of this seed source is ……. **(*Attach certified copies of qualifications/skills)***

I/We, enclose proof of payment for the sum of ……..... Kenya Shillings in payment of this inspection

FARM MAP AND LOCATION

"Important" – indicate the locality of seed source, access from the nearest road if space is not adequate use additional plain paper and attach it to this application form.

Declaration:

In signing this application, I also declare that I am conversant with and shall observe the various clauses and conditions of these Regulations.

Signature of Applicant ……..…… Stamp of Seed Producer……..

Date ……

THIRD SCHEDULE-(*Contd*.)

FORM VPS 5B **(r. (17)(2))**

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE (KEPHIS)
SEED SOURCE INSPECTION RESULTS

Date……..

Seed Source Registration Code…….....
Seed Source Name …….....
Species ……..... Scientific(botanical) Name……...
Common Name……..... Source type…….
Locality (County)…… Ward……Sub-location…….……
Hectares ……..... Class …….....

ITEMS:

1. Approximate number of trees in the stand_____
2. Is the source true to type? Yes ☐ No ☐ Doubtful ☐
3. Isolation distance species-(m) from stand of same genus ……
4. Off-type(s) (describe) ……..…
5. Other Species adjacent or within the stand; specify……
6. Health (Diseases and pests; specify……
7. General accessibility of the source: Good ☐ : Satisfactory ☐ :Not Satisfactory ☐
8. Estimated annual production (Kg)…….
9. Inspection Result: Pending ☐ : Approved ☐ :Rejected ☐
10. Reason for rejection ……..…..

……..……...……...……..

11. Further Remarks …….……

Signature: ……..…… Name ……..…….
Seed Inspector

Date ……..…….

THIRD SCHEDULE-(*Contd*.)

FORM VPS 6A **(r. 18 (1)**

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
APPLICATION FOR INSPECTION OF VPS PRODUCTION FIELD/ FACILITIES

1). I/We, hereby apply for a production field inspection:
Applicant's Name ……
Address ……Tel No……
Email…….
County ……..… Sub-County ……..…… Ward …….…… Location
…… Sub-location ……..…… LR No……
Size (Hectares): ……
2).

Facility type and capacity	Tick appropriately ✓
Tissue culture laboratory	
Aeroponics	
Hydroponics	
Hardening nursery	
Treatment center	
Seedling nursery	
others (state)	

NB: (Use appropriate units per period for capacity)

3). List the VPS you would wish to deal in.
a) …….
b) …….
c) …….
d) …….
e) …….

4). Duration of the VPS in the field…….. (if applicable)

5). KEPHIS Certificate # …… (if applicable)

6). Minimum Requirements

Field hygiene in the production facility
Quality of soil and or irrigation water
Media treatment
Isolation distance/contaminations
Clear separation of operations in the facility
Year-round source of reliable quality water
Security of the facility
Nursery operations
Documented procedures for each facility

7). FARM SKETCH MAP AND LOCATION OR GPS COORDINATES

"Important" – indicate the situation of different crops, stores , access from the nearest road and number each crop as 1,2,3, etc. if space is not adequate use additional plain paper and attach it to this application form.

For Official Use

Remarks/Decision

……
……
……
……
……
……

Name of Inspector…… Signature…… Date…….

Managing Director, KEPHIS

THIRD SCHEDULE-(*Contd*.)

FORM VPS 6B
(r.18(3)

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
VPS PRODUCTION FIELD/ FACILITY INSPECTION REPORT

1). Name of the VPS producer……
(**Tick as necessary** ✓): First inspection ……. Re-inspection ……..
Date of Inspection……
KEPHIS #. For the VPS producer……..
Name of the production field/facility…….
County ……Sub-County ……Ward …… Location …….. Sub-location ……..LR.#…….
2). Observations

Production field/facility hygiene……
Quality of soil and or irrigation water …….
Isolation distance ……..……
Separation of operations in the facility ……
Water supply……
Security of the field/facility ……..……
Additional structures for operations ……..
Documented procedures ……
Any other observation……

3). Comments/ Recommendations

i. ……
ii. ……
iii. ……
iv. ……
v. ……

4). Decision i) Approved…… ii) Rejected……..…….

Name of Inspector…… Signature……Date…….
Managing Director, KEPHIS

THIRD SCHEDULE-(*Contd*.)

FORM VPS 7A
(r.19(1))

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
APPLICATION FOR INSPECTION OF VPS CROP

The Managing Director
Kenya Plant Health Inspectorate Service
P.O. Box 49592 00100
NAIROBI, KENYA

1. Full Name of the VPS producer ……
2. Name of the production field/facility……
3. County ……Sub-County …….Ward ……

   Location …….. Sub-Location ……..LR. No…….
4. KEPHIS No…….

5. Details of crop

Crop variety……Species……

Crop No.	Lot No. of seeds used	Class of seed used	Ha	Date planted	Approx. of date harvest	Previous cropping history(Last 3 seasons		

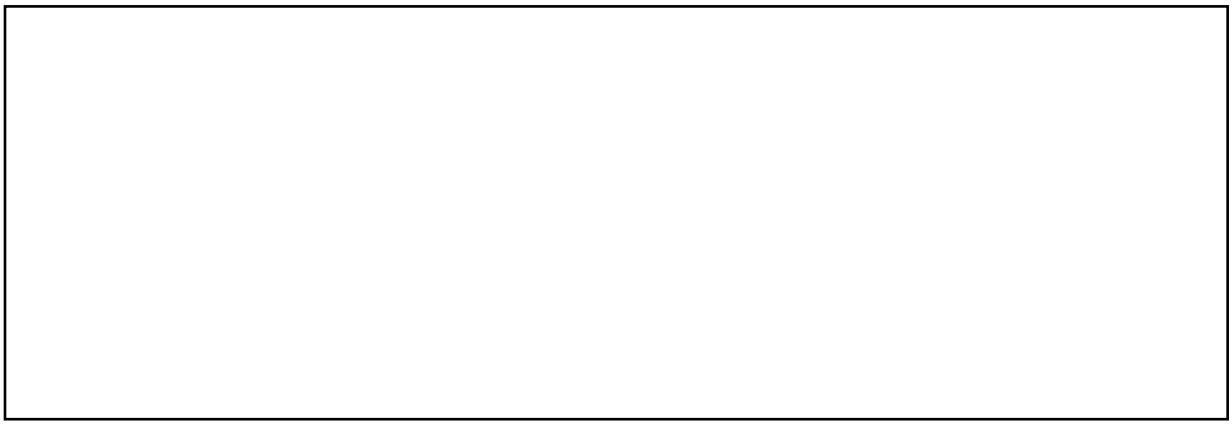
I have enclosed a cheque of the sum of shillings ……in payment of this inspection and ……..number of labels of the VPS used for establishing for this crop(s); as proof of origin.

The person who will daily be in charge of this VPS crop is;

Name:……..Mobile Number ……..

6).FARM SKETCH MAP AND LOCATION OR GPS COORDINATES

"important" – indicate the situation of different crops, stores , access from the nearest road and number each crop as 1,2,3, etc. if space is not adequate use additional plain paper and attach it to this application form.



7). Declaration:

In signing this application, I also declare that I am conversant with and shall observe the various clauses and conditions of Vegetatively Propagating Seeds Regulations. I also declare that I have no knowledge of any zero-tolerance disease for the crop species being registered for inspection on this land for the previous seasons.

Date …….. Signature of applicant……

THIRD SCHEDULE-(*Contd*.)

FORM VPS 7B
(r.19 (3))

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
VPS CROP INSPECTION RESULTS

1. Full Name of the VPS producer ……
2. Name of the production field/facility…….
3. County ……Sub-County …….Ward ……

   Location …….. Sub-Location ……..LR. No…….
4. KEPHIS No…….
5. Details of crop

Crop variety……Species……

Crop #.(s) ……Hectares…… Class ……

Inspection (tick appropriately ✓) 1st ☐ 2nd ☐ 3rd ☐

ITEMS:

1. Is the crop true to type? ☐ Yes ☐ No ☐ Doubtful

Remarks……..

2. Isolation in distance/time ☐ satisfactory ☐ Not Satisfactory

Remarks……..

3. Off-type(s) (describe)…….

Remarks……..

4. Noxious Weeds (Specify) …… Total found ……..

5. Other Crop Species (specify)…….

6. Health (Diseases)……

7. Crop Stand ☐ Good ☐ Satisfactory ☐ Not satisfactory

Remarks……..

8. Estimated yield at final inspection (*if applicable*)…….

9. No. of counts made…… Average count……

10. No. of plants counted……diseased/off type plants found in %……

11. Crop Results ☐ Pending ☐ Approved ☐ Rejected.

12. If rejected (reasons provided)

……
….
……
…
……
….

13. If crop is to be re-inspected, appeal and re-inspection should be done within ……. days

14. Further Remarks

……
……
……
……
……
……
……
……

VPS Inspector(s) Name……Signature…….Date……

FOR: MANAGING DIRECTOR

THIRD SCHEDULE-(*Contd*.)

Form VPS 7B1

(r.19. (3))

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
SEEDLING INSPECTION RESULTS

1. Full Name of the VPS producer ……
2. Name of the production field/facility…….
3. County ……Sub-County …….Ward ……

   Location …….. Sub-Location ……..LR. No…….
4. KEPHIS No…….
5. Details of crop

Seedling variety…… Species ……

Seedling type. ☐ GraftedTissue ☐ culture

Seedling Batch No.(s) …… Units…… Class …….

6. Inspection (tick appropriately✓) 1st ☐ ☐nd

7. Items

a. Production facility compliance Yes ☐ No ☐ Doubtful ☐

Remarks……..

b. Compliance to Seedling production protocol, …… Satisfactory …… Not Satisfactory …..

Remarks……

c. Seedling Health Satisfactory ☐ Not Satisfactory ☐

d. Remarks……..

8. Media suitability……Satisfactory…….. … Not Satisfactory …….

Remarks……..

9. Seedling root formation…….

Remarks……

10. Seedling Stand ☐ Good ☐Satisfactory ☐ Not satisfactory

Remarks……..

11.Seedling Results: Pending☐ Approved☐ Rejected ☐

12. If rejected (reasons provided)

……

….

……

……

…….

……

…

13.If Seedlings are to be re-inspected, appeal and re-inspection should be done within ……. days

14.Further remarks

……

……

……

……VPS Inspector(s)

Name……Signature…….Date……

FOR: MANAGING DIRECTOR

THIRD SCHEDULE-(*Contd*.)

FORM VPS 8A **(r.20 (1))**

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
REQUEST FOR SAMPLING/TESTING OF A VPS CROP FOR CERTIFICATION

To,
Seed testing laboratory
……..
Date……..

(A) DETAILS OF SAMPLE (To be provided by the VPS producer/processor/seller)

1. Name and Address of the producer/processor/seller……..
2. Local production site……..
3. Imported from……(tick) Seed Import Permit No……Phytosanitary certificate No…….(in case of import)
4. Species……. Variety……... Class…….
5. Seed lot number…….. Ref No…….....
6. Weight of the lot…….Number of VPS …… Seed dressed with…….. chemical (if applicable)
7. Date on which the seed is ready for sampling……
8. Further remarks (e.g. noxious weeds, seed borne disease observed in the field, seed blends e.t.c.)……..……
9. Tests required: Purity, Moisture content/noxious weed/diseases/pests/post control plots (if other specify)……..
10. Facility where the seed are stored……
11. Number of samples required……
12. Number of copies required……...
13. The cost of tests to be paid by……
14. Date and signature of the VPS producer/processor/seller

Signature ……. Date……

(B) SAMPLING (to be done by the VPS sampler)

Date of sampling……..
I certify that this sample was drawn by me in the prescribed manner.
Name of Sampler…….. Signature…… Date …….
Further remarks……..……..
Remarks of the sample reception officer in the Seed Testing Laboratory
……
……
……
Name of analyst……..Signature ……Date…….

Copies to:
1. Seed testing laboratory
2. Technical Administration
3. Seed producer/processor/seller
4. Sample book

THIRD SCHEDULE-(*Contd.*)

FORM VPS 8B **[r. 20(2)(b)**

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
VPS TESTING CERTIFICATE RESULTS

Date sample received in the laboratory……..

Date of sampling……Name of sampler……..

Lot number…….

Weight of the lot……..VPS counts…….

Crop species……..

Crop variety…….

Origin local production……Import…… (tick as appropriate)

Condition of the sample at reception Accepted……..Rejected…….. (tick as appropriate)

Analysis required Purity……Germination……Pests/Disease (specify)…… (tick as appropriate)

Method of analysis used…….

Results/findings of analysis……

Recommendations

…….……..

Decision lot is passed as VPS …….. Lot is failed as VPS …….. (tick as appropriate)

Date reported…….

Test report No……..

Cost of analysis (KShs)…….Government sample…….(tick as appropriate)

Name of analyst……..Signature ……Date…….

Verified by (name)……..Signature ……Date…….

Approved by (name)……Designation..……...Signature ……Date…….

For Managing Director

THIRD SCHEDULE-(*Cont'd.*)

FORM VPS 9A **(r.22 (4a))**

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
NOTICE TO PREPARE VPS

The Managing Director
……
Date…….

Request for Seed Preparation Inspection

Name of producer/processor……..
Crop Season ……
VPS producer No…….
Species……
Variety…….
Class……..
Lot Weight……Counts ……

Provisional Germination/establishment/Health status……..

Date…….Signature…….
Stamp of the processor

FORM VPS 9B **(r. 22 (4b)**

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
NOTIFICATION FOR PREPARATION VERIFICATION
(For Quality Declared Standard Seed)

The Managing Director
……
Date…….

Lot details

Seed Producer……..

Crop Season ……

Field no(s)…….

Monitoring Inspection/Test results certificate no.(s)…….

Species……

Variety…….

Class……..

Lot Weight……

Signature……. Date…….

Stamp of the Seed producer

FOR OFFICIAL USE

Lot verification

Lot no.	No. of Containers /Size	Damaged %	Diseased %	Off types %	Off size %	Verification remark

Other remarks……
Decision…….

Signed…… Seed Inspector……Date……

For. MANAGING DIRECTOR, KEPHIS

THIRD SCHEDULE-(*Contd.*)

FORM VPS 9C **r.22(6a)**

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
PREPARATION INSPECTION RESULTS FORM

1. Full name of the VPS producer _____
2. Name of the production field/facility…….
3. County ……Sub county …….Ward …… Location

   ……..

   Sub-location ……..LR.No…….
4. KEPHIS No…….
5. Details of crop

Crop variety……Species……

The crop variety specified above has been inspected and found to have met the standard as specified in schedule 7.

Name ……..Signature ……Date…….

FORM VPS 10A **(r. 23(1)**

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
NOTIFICATION FOR PACKAGING, LABELING AND SEALING

The Managing Director
……
Date…….

PART I

Lot details

Seed Producer……..

Crop Season ……

Field no(s)…….

Inspection/Test results certificate no(s)…….

Blend No…….

Species……

Variety…….

Class……..

Lot Weight……

Signature……. Date…….

Stamp of the Seed producer

PART II

FOR OFFICIAL USE

Verification remarks……
Decision……
Labels/seals issued……..

Lot verification/labelling/sealing

Lot no.	Verification remark	No. of Labels	Serial Nos. of Label Issue	No. of unused labels	Date of sealing	No. of seals used	Containers/ size	Sample No.

Signed…… Seed Inspector……Date……

For. MANAGING DIRECTOR, KEPHIS

FORM VPS 11
r.(26(8))

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
STOP SALE ORDER

Seed Producer/ Seed Seller ……...……
Address ……..……

The following lots of seeds are found to be in violation of vegetatively propagating seed regulations:

Species	No. of containers	Quantity (Kg)	Type of violation	Sampled	
				YES	NO

By this notice, you are ordered to hold these lot/ lots of seed intact at …….. ……. until compliance with the law has been achieved and the seed has been released from this order or ***marked rejected for disposal***.

As soon as steps have been taken to remove the **violation**, please advice The Service in writing:

Other Instructions……..…

Signed…… Seed Inspector……Date……

For. MANAGING DIRECTOR, KEPHIS

Form VPS 12A **(r. 27)**

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
DISPOSAL FORM

I, ... (*insert name of registered seed producer*)
of.....(*insert Sub - County*) in .....County, in compliance to the order to dispose rejected seed lots, agree to dispose the following rejected Vegetatively Propagating Seed lots (*indicate names, lot numbers and quantities)*
.....

.....
.....
.....
.....

using the following ***method for disposal** .....

.....
.....
.....
.....
on the ……..(indicate date) and at the following venue…… (indicate the disposal site)

FOR OFFICIAL USE

Comments from inspector.....
.....
.....
.....
.....
Decision.....Date.....
Name.....Signature.....

**The disposal method of the vegetatively propagating seed lots shall take into consideration compliance to environmental management requirements*

FORM VPS 12B **r.27**

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
SEIZURE FORM

To,
Name ……
Address ……..……
The following items in use and the **'seed'** have been found to be in violation of vegetatively propagating seeds regulations:

Item	Description	Other marks	No. of items	Quantity as applicable	Kind of violation	Consignment	
						Holding on site	

By this notice your items are seized and you are requested to abide by the order until compliance of the law has been achieved and advised accordingly

Other remarks
……..…….

Inspector…… Signature ……Date
……..……..

FORM VPS 13 r. 30 (2)

REPUBLIC OF KENYA
KENYA PLANT HEALTH INSPECTORATE SERVICE
VEGETATIVELY PROPAGATING SEED STOCK RECORD FORM

To. The Managing Director
Kenya Plant Health Inspectorate Service
P.O. Box 49592- 00100
NAIROBI, KENYA

Quarter ……Year: …… Name of PRODUCER:_.....

(Guiding notes)

I. Jan-Feb- Mar (Reporting month is April)
II. Apr-May-June (Reporting month is July
III.July-Aug-Sep (Reporting month is October)
IV. Oct- Nov- Dec (Reporting month is January of the preceding year)

Quantity in Kg/Units of VPS (In case of seedlings and plants parts)

Number	Crop species	Variety Name	Seed Class	Opening stock on the first day of the Quarter	Quantity produced locally & labelled during the Quarter	Total Quantity imported	Total in stock	Total Quantity sold (SALES- local)	Total quantity exported SALES- export)	Total Quantity sold but held with seller as stock	Closing Stock on the last day of the Quarter
	1	2	3	4	5	6	7	8	9	10	11
							(4+5+ 6)				7- (8+9)- 10)

Name: _____ Address: _____

Official stamp: _____

Signature: _____Date: _____

FOURTH SCHEDULE - FEES (r.5; r.7; r.9; r.17, r.18, r.19, r.20,r. 22, r.23)

I.REGISTRATION FEES (KSHS)

Categories	**Hectarage/VPS Units**	**Registration Fees (one off)**	**Registration Renewal fees (annual)**
Small scale Producer/Processor	≤3 Ha or ≤50,000 units	5,000	2,000
Medium scale Producer/Processor	3 – 8 Ha or 50,000 – 250,000 units	35,000	8,000
Seed Merchant (Large scale producer/seller/TC laboratory)	>8 Ha, Including Import/Export	75,000	10,000
Medium scale seller	50,000 – 250,000 units	12,000	5,000
Small scale seller	≤50,000 units (bags/bales)	4,000	1,500

2.FIELD AND FACILITY FEES (KSHS)

Crop under certification	Facility Inspection		Inspection per Hectare	Minimum per Field	Re-inspection on appeal at owner's request	
	Tissue culture	Screen house			Per Hectare	Min. per Field
Macadamia certified		1500	140	700	280	1120
Macadamia standard		1500	140	700	280	1120
Cashew certified		1500	140	700	280	1120
Cashew standard		1500	140	700	280	1120
Coconut certified		1500	140	700	280	1120
Coconut standard		1500	140	700	280	1120
Sugarcane certified		1500	140	700	280	1120
Sugarcane certified		1500	140	700	280	1120
Oil Palm certified		1500	140	700	280	1120
Oil Palm standard		1500	140	700	280	1120
Pyrethrum certified		1500	140	700	280	1120
Pyrethrum standard		1500	140	700	280	1120
Banana certified	2500	1500	140	700	280	1120
Banana standard	2500	1500	140	700	280	1120
Mango certified		1500	140	700	280	1120
Mango standard		1500	140	700	280	1120
Avocado certified		1500	140	700	280	1120
Avocado standard		1500	140	700	280	1120
Sweet potato certified	2500	1500	140	700	280	1120
Sweet potato standard	2500	1500	140	700	280	1120
Potato certified	2500	1500	430	1935	710	2470
Potato standard	2500	1500	430	1290	710	2470
Cassava certified	2500	1500	140	700	280	1120
Cassava standard	2500	1500	140	700	280	1120
Nappier certified		1500	140	700	280	1120
Nappier standard		1500	140	700	280	1120
Bracharia certified	2500	1500	140	700	280	1120

Bracharia standard	2500	1500	140	700	280	1120
Other VPS	2500	1500	140	700	280	1120

3.LOT EXAMINATION, SAMPLING, LABELLING, AND SEALING FEES r. 16 (12), r. 17 (7), r. 14 (4),

Crop under certification	Sampling and Lot examination per Unit		Labelling and sealing and other services >/=50Kg		Labelling and sealing and other services </=50Kg		Re-sampling per Lot.	Min. per Lot
	50 Kg	Quantity	Kg	Quantity	Kg	Quantity		
Macadamia certified		7.5		2.5		2.5	4	250
Macadamia standard		7.5		2.5		2.5	4	250
Cashew certified		7.5		2.5		2.5	4	250
Cashew standard		7.5		2.5		2.5	4	250
Coconut certified		7.5		2.5		2.5	4	250
Coconut standard		7.5		2.5		2.5	4	250
Sugarcane certified		7.5		2.5		2.5	4	250
Sugarcane certified		7.5		2.5		2.5	4	250
Oil Palm certified		7.5		2.5		2.5	4	250
Oil Palm standard		7.5		2.5		2.5	4	250
Pyrethrum certified		7.5		2.5		2.5	4	250
Pyrethrum standard		7.5		2.5		2.5	4	250
Banana certified		7.5		2.5		2.5	4	250
Banana standard		7.5		2.5		2.5	4	250
Mango certified		7.5		2.5		2.5	4	250
Mango standard		7.5		2.5		2.5	4	250
Avocado certified		7.5		2.5		2.5	4	250
Avocado standard		7.5		2.5		2.5	4	250
Sweet potato certified	7.5		2.5		2.5		4	250
Sweet potato standard	7.5		2.5		2.5		4	250
Potato certified	15	-	5				7.5	475
Potato standard	15	-	5				7.5	475
Cassava certified	7.5	7.5		2.5		2.5	4	250
Cassava standard	7.5	7.5		2.5		2.5	4	250

Nappier certified		7.5		2.5		2.5	4	250
Nappier standard		7.5		2.5		2.5	4	250
Bracharia certified		7.5		2.5		2.5	4	250
Bracharia standard		7.5		2.5		2.5	4	250
Other VPS	7.5	7.5	2.5	2.5		2.5	4	250

4.SAMPLING OF IMPORTED VPS FEES

Crop under certification	Minimum fees (1000 Kg)	Minimum fees (Counts)	Fees Per (100 Kg)	Fees Per (Counts)	Fees per 2000 Kg	Fees per 2000 seedlings
Macadamia certified		1200		260		1460
Macadamia standard		1200		260		1460
Cashew certified		1200		260		1460
Cashew standard		1200		260		1460
Coconut certified		1200		260		1460
Coconut standard		1200		260		1460
Sugarcane certified		1200		260		1460
Sugarcane certified		1200		260		1460
Oil Palm certified		1200		260		1460
Oil Palm standard		1200		260		1460
Pyrethrum certified		1200		260		1460
Pyrethrum standard		1200		260		1460
Banana certified		1200		260		1460
Banana standard		1200		260		1460
Mango certified		1200		260		1460
Mango standard		1200		260		1460
Avocado certified		1200		260		1460
Avocado standard		1200		260		1460

Sweet potato certified	1200		260		1460	
Sweet potato standard	1200		260		1460	
Potato certified	600		130		730	
Potato standard	600		130		730	
Cassava certified	1200		260		1460	
Cassava standard	1200		260		1460	
Napier certified		1200		260		1460
Napier standard		1200		260		1460
Brachiaria certified		1200		260		1460
Brachiaria standard		1200		260		1460
Other VPS		1200		260		1460

5.LABORATORY VPS TESTING FEES (KSHS) r. 13 (3a)

Crop under certification	Purity and germination /establishment	Moisture Test	Seed Health				Tetrazo-Lium Test	1000 Seed Count	Vigour Test	ISTA Certification	Re-testing for purity germination
			PCR Based								
			VIRUS	FUNGI	BACTERIA	Nematode					
Macadamia certified	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Macadamia standard	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Cashew certified	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Cashew standard	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Coconut certified	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Coconut standard	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Sugarcane certified	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Sugarcane certified	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A

Oil Palm certified	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Oil Palm standard	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Pyrethrum certified	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Pyrethrum standard	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Banana certified	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Banana standard	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Mango certified	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Mango standard	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Avocado certified	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Avocado standard	N/A	250	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Sweet potato certified	N/A	250	3000	3000	3000	3000	0	0	0	-0	-0
Sweet potato standard	N/A	250	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Potato certified	1500	500	1000	1000	1000	1000	1000	1000	1000	1000	1000
Potato standard	1500	500	1000	1000	1000	1000	1000	1000	1000	1000	1000
Cassava certified	N/A	250	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Cassava standard	N/A	250	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Napier certified	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Napier standard	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Brachiaria certified	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Brachiaria standard	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A
Other VPS	N/A	N/A	3000	3000	3000	3000	N/A	N/A	N/A	N/A	N/A

FIFTH SCHEDULE r. (5)

REPUBLIC OF KENYA

KENYA PLANT HEALTH INSPECTORATE SERVICE

REQUIREMENTS FOR REGISTRATION OF VPS PRODUCER

Requirements	**For Certified Seed Production**			**For Quality Declared Standard Seed**
Requirements				
Scale of operation / Facilities	Small scale	Medium scale	Large scale	Small Scale Producers
Business Registration	Certificate of registration as either company, legally incorporated entity, CBO, SHG, Cooperatives (scale dependent)	Certificate of registration as either company, legally incorporated entity, CBO, SHG, Cooperatives (scale dependent)	*Registered Seed Merchant	CBO, SHG, Cooperatives Need to operate as groups (min. 20 members) /communities
Tissue culture labs-blanket requirements	**Up to 500,000 plantlets/yr** Approved laboratory, Lab technologist/lab manager, Equipment, SOPs, Occupational safety measures Growth chamber	**Up to 1M plantlets/yr** Approved laboratory, Lab technologist/ lab manager, Equipment, SOPs, Quality assurance manager Occupational safety measures Growth chamber	**Over 1M plantlets/yr** Accredited laboratory, Lab technologist/lab manager, Quality assurance manager Equipment, SOPs, Occupational safety measures Lab management system Growth chamber	N/A
Greenhouse/screen house /aeroponics/hydroponics/ nursery	Up to 250sq.m area Approved greenhouse, nursery structure trained worker, greenhouse equipment, greenhouse guidelines and SOPs, water management plan PPE and occupational safety measures Chemical stores	Up to 1000sq.m area approved greenhouse/ nursery structures trained workers, trained supervisor green house equipment, greenhouse guidelines and SOPs, water management plan PPE and occupational safety measures Chemical stores Waste disposal and management system	above 1000sq.m area Approved green house/ nursery structure trained worker, greenhouse equipment, greenhouse guidelines and SOPs, water management plan PPE and occupational safety measures Chemical stores Waste disposal and management system	Up to 250sq.m area Greenhouse structure/nursery trained worker, green house equipment water management plan PPE and occupational safety measures Chemical stores
Open Nurseries				
Open Field	Annuals: upto 20 acres/yr including rotational program (50,000 units) Seed processing/grading area equipment Seed storage facilities Knowledge on VPS production Trees: **upto 100 trees** Seedling processing/grading area Tree management plan Equipment for seedling processing Seed storage facilities Knowledge on VPS production	Annuals: upto 100 acres/yr Seed processing/grading area Equipment for mechanized operations Seed processing equipment Seed storage facilities Trained personnel on VPS production Trees: **100- 200 trees** Seedling processing/grading area Tree management plan Equipment for seedling processing Seed storage facilities Trained personnel on VPS	Annuals: 200 acres/yr and over Seed processing/grading area Equipment for mechanized operations Seed processing equipment Seed storage facilities Trained personnel on VPS production Trees: **over 200 trees** Seedling processing/grading area Tree management plan Equipment for seedling processing Seed storage facilities Trained personnel on VPS	Annuals upto 20 acres/yr Seed processing/grading area equipment Seed storage facilities Knowledge on VPS production Trees: **Less than 100 trees** Seedling processing/grading area Tree management plan Equipment for seedling processing Seed storage facilities Knowledge on VPS production
Other	Case based and as the Service may recommend	Case based and as the Service may recommend	Case based and as the Service may recommend	Case based and as the Service may recommend

*a registered seed merchant is eligible for approval to undertake VPS production upon notifying the Service in accordance with requirements of the regulatio

FIFTH SCHEDULE **r. 7**

REPUBLIC OF KENYA

KENYA PLANT HEALTH INSPECTORATE SERVICE

REQUIREMENTS FOR REGISTRATION OF A VPS SELLER

Requirements

i. Valid business registration

ii. Business premise

iii. Means of transport for specific VPS

iv. Evidence of skills in handling of specific VPS

v. Handling/storage facility for specific VPS

vi. Proof of business arrangements with VPS producer

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SIXTH SCHEDULE **r.13**

REPUBLIC OF KENYA

KENYA PLANT HEALTH INSPECTORATE SERVICE

SEED CLASSES

Code	**Classes**	**Seed Parents**	**The crops**	**Colour of Labels**
Br.	Breeder	Progeny of parental stock	Potato, Sugarcane, Cassava, Sweet potato, Napier, Brachiaria, Pyrethrum	White with a violet strip
Pb	Pre-basic	Progeny of parental stock or breeders seed	Potato, Sugarcane, Cassava, Sweet potato, Napier Brachiaria, Pyrethrum	White with a violet strip
B.	Basic	Progeny breeders seed or pre-basic seed	Potato, Sugarcane, Cassava, Sweet potato, Napier, Brachiaria, Pyrethrum	White
C.1	Cert. 1st gen.	Progeny of pre-basic seed or basic seed	Potato, Sugarcane, Cassava, Sweet potato, Napier, Brachiaria, Pyrethrum	Blue
C.2	Cert. 2nd gen.	Progeny of basic seed or certified 1st generation seed	Potato, Sugarcane, Cassava, Sweet potato, Napier, Brachiaria, Pyrethrum	Red
C.3	Cert. 3rd gen.	Progeny of basic seed or certified 2nd generation seed	Potato, Sugarcane, Cassava, Sweet potato, Napier, Brachiaria, Pyrethrum	Red
Std	Standard Seed	Progeny of certified 3rd generation or certified standard seed or by declaration by the Cabinet Secretary.	Potato, Sugarcane, Cassava, Sweet potato, Napier, Brachiaria, Pyrethrum	Yellow

NOTE: grafted seedlings: "certified seedling" as a class.
TC plantlets: clonal stocks before "Breeders seed". Subsequent growing in field generates "Breeders seed"

SEVENTH SCHEDULE (r .18)

REPUBLIC OF KENYA

KENYA PLANT HEALTH INSPECTORATE SERVICE

FIELD AND LABORATORY STANDARDS

FIELD AND LABORATORY STANDARDS FOR PRODUCTION OF CERTIFIED GRAFTED AVOCADO (*PERSIA AMERICANA*) SEED CLASSES

Field Standards	
Cropping History (Seasons) The propagation structure should always be maintained clean regular cleaning/disinfection with mild detergents should be done and records maintained. Where *Phytopthora ciannamomi* has been detected, the structure must not be used for Avocado propagation until it has been fully disinfected.	Remarks Nursery must be located in an area that is well drained and does not flood and potting materials must be placed on freely drained surfaces and where possible on elevated platforms to enable free drainage. Waste water must not flow through the nursery. Provision has to be made for sufficient furrows and / or drainage channels at the top end and sides of the nursery area (if located in a slopy area). It is advisable to have a footbath at the entrance where disinfection takes place.

Isolation, metres (minimum) for Rootstock Varieties					
BR	**PB**	**B**	**C1**	**C2**	**Std**
100	**100**	**100**	**50**	**50**	**50**
Isolation, metres (minimum) for Scion Varieties					
BR	**PB**	**B**	**C1**	**C2**	**Std**
100	**20**	**20**	**10**	**10**	**10**
Isolation, metres (minimum) for Grafted Seedlings					
BR	**BR**	**BR**	**BR**	**BR**	**BR**
10	**10**	**10**	**10**	**10**	**10**
Off types of other cultivars (maximum per 10 plants (1%)/ 1000 plants seedling block					
BR	**PB**	**B**	**C1**	**C2**	**Std**
10	**0**	**0**	**10**	**10**	**10**

	Crop pest/disease tolerance (Tolerance %, No. of plants) per 5,000 lot											
	Field						**Laboratory**					
Disease/pest	**BR**	**PB**	**B**	**C1**	**C2**	**S**	**BR**	**PB**	**B**	**C1**	**C2**	**S**
Phtopthora root rot (*Phytophthora cinnamomi)*	**10**	**2**	**2**	**2**	**2**	**4**	**1**	**1**	**1**	**2**	**2**	**5**
Algal leaf spot *(Cephaleuros virescens)*	**20**	**4**	**4**	**4**	**4**	**8**	**2**	**2**	**2**	**4**	**4**	**10**
Scab (*Sphaceloma perseae*)	**20**	**4**	**4**	**4**	**4**	**8**	**2**	**2**	**2**	**4**	**4**	**10**
Pythium root rot *(Pythium species)*	**1**	**1**	**1**	**1**	**1**	**2**	**1**	**1**	**1**	**2**	**2**	**4**
Phytophthora trunk canker (*Phytophthora cinnamomi)*	**1**	**1**	**1**	**1**	**1**	**2**	**1**	**1**	**1**	**2**	**2**	**4**

Gall canker *(Tubercularia lateritia)*	**1**	**1**	**1**	**1**	**1**	**2**	**1**	**1**	**1**	**2**	**2**	**4**
Stem dieback or graft rot (Fungi from the family *Botryosphaeriaceae*)	**1**	**1**	**1**	**1**	**1**	**2**	**1**	**1**	**1**	**2**	**2**	**4**
Rhizoctonia root rot (*Rhizoctonia species)*	**2**	**2**	**2**	**2**	**2**	**4**	**2**	**2**	**2**	**4**	**4**	**6**
Presence of foraging and sucking Pests such as Mites, Aphids caterpillars etc	**5**	**5**	**5**	**5**	**5**	**10**	**5**	**5**	**5**	**10**	**10**	**20**

Processing Standards

Parameter	**Tolerance 1 – 4% (Number of seedlings with abnormality per 1000 lot)**					
Abnormality	**BR**	**PB**	**B**	**C1**	**C2**	**Std**
Chlorotic seedlings from poor media composition	**2**	**2**	**2**	**4**	**4**	**4**
Stunted growing tips due to sucking by mites	**2**	**2**	**2**	**4**	**4**	**4**
More than 15% leaf perforations by leaf biting insects such as systate weevils	**5**	**5**	**5**	**10**	**10**	**10**
Presence of grafting tape on ready seedlings	**5**	**5**	**5**	**10**	**10**	**10**
Bent stems (Below graft union)	**2**	**2**	**2**	**5**	**5**	**5**
Bent stems (graft graft union)	**0**	**0**	**0**	**0**	**0**	**0**
	Tolerance (maximum number of units outside the class range eg number of seedlings in 1000 seedling block)					
Processing classes	**BR**	**PB**	**B**	**C1**	**C2**	**Std**
Class 1 (minimum-maximum size range within class) 20 – 30 cm	**2**	**2**	**2**	**2**	**2**	**2**
Class 2 minimum-maximum size range within class – 30 -40 cm	**10**	**10**	**10**	**10**	**10**	**10**
Class 3 minimum-maximum size	**60**	**60**	**60**	**60**	**60**	**60**

range within class 3000 seedlings truck load 40 -50 cm						
Parameter	**Maximum lot size (measure)**					
Lot sizes (Max number of units in standard measure to represent a single lot)	**BR**	**PB**	**B**	**C1**	**C2**	**Std**
	20,000	**20,000**	**20,000**	**20,000**	**20,000**	**20,000**
Post Control standards	**Physical purity (%) per 1000**		**Off types (no. of plants per 100 plants/ 1000 plants**		**Pests and diseases (tolerance limit)**	
	98%		**0**		**0**	

STANDARDS FOR PRODUCTION OF CERTIFIED APPLE (*Malus domestica*) VEGETATIVELY PROPAGATING SEEDS

Propagating material	Cropping History (Seasons)	Remarks
Apple (Seed Source - Root stock)	Trees from an existing orchard can be identified or new mother block can be established sources of root stocks. A replant site requires two to three years of crop rotation.	The source should be free of any pest and disease of phytosanitary concern
Apple (Seed Source - Scions)	Trees from an existing orchard can be identified or new mother block can be established sources of scions. A replant site requires two to three years of crop rotation.	The source should be free of any pest and disease of phytosanitary concern
Apple (Grafted Seedlings)	N/A	The nursery/shade house should be free from any disease of phytosanitary concern. Avoid water logging areas. Follow phytosanitary control measures for fungal and bacterial diseases both in the propagation media and within the facility

Isolation Distance and off types	Distance in metres (minimum)							Off-types of other cultivars						
	BR	PB	B	C1	C2	C3	Std	BR	PB	B	C1	C2	C3	Std
Species	Maximum Number Per 100 Plants													
Apple (Seed Source for **Root stock and Scions)** from other apple species	100	100	100	50	50	40	30	0	0	0	1	1	2	4

Key: BR = Breeder's seed; PB = Pre-basic Seed; B = Basic seed; C1,C2, C3= Certified Generation 1, 2 & 3;S- Standard
Note: Standard seed will be inspected for phytosanitary and physical purity

Crop Diseases/Pests and tolerance levels	Maximum permissible limits (%)						Laboratory Confirmation							
	BR	PB	B	C1	C2	C3	S	BR	PB	B	C1	C2	C3	S
Powdery Mildew- Podosphaera leucotricha	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*Ring Spot- Apple ring spot virus	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0	0	0	0	0	0	0
*Dieback *(Phytophthora cinnamomi) Trametes versicolor (polystictus), Trametes velutina & Pycnoporus coccineus*	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Armillariella Root Rot- *Armillariella mellea*	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Collar rot -*Sclerotium rolfsii*	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Green Crinkle – Apple green crinkle virus	0	0	0	0	0	0	0	0	0	0	0	0	0	0

FIELD AND LABORATORY STANDARDS FOR PRODUCTION OF CERTIFIED CASHEW GRAFTED SEEDLING CLASSES

Field Standards	
Cropping History (Seasons)	**Remarks**
The propagation structure should have been maintained clean for at least one month prior to introduction of the new crop.	Nursery must be located in an area that is well drained and does not flood. The potting mixture should be free of soil-borne diseases such as Fusarium Wilt.

Isolation, metres (minimum) Rootstock Varieties from commercial crops					
BR	**PB**	**B**	**C1**	**C2/C3**	**Std/QDSS**
50	**50**	**50**	**25**	**-**	**25**
Isolation, metres (minimum) Scion Varieties from commercial crops					
BR	**PB**	**B**	**C1**	**C2/C3**	**Std/QDSS**
15	**15**	**15**	**15**	**-**	**10**
Isolation, metres (minimum) Grafted seedlings from next variety within nursery structure					
BR	**PB**	**B**	**C1**	**C2/C3**	**Std/QDSS**
2	**2**	**2**	**2**	**-**	**2**
Off types of other cultivars (maximum per 1000 plants seedling block)					
BR	**PB**	**B**	**C1**	**C2/C3**	**Std/QDSS**
0	**0**	**0**	**1**	**-**	**2**

	Crop pest/disease tolerance (Tolerance %)											
	Field						**Laboratory**					
Disease/ pest	**BR**	**PB**	**B**	**C1**	**C2/C3**	**S/Q DSS**	**BR**	**PB**	**B**	**C1**	**C2/C3**	**S/Q DSS**
Powdery mildew *Oidium anacardii*	**0**	**0**	**0**	**0.1**	**0.1**	**0.2**	**0**	**0**	**0**	**0**	**0**	**0**
Anthracnose ***(Colletotrichum gloeosporioides***	**0**	**0**	**0**	**0.1**	**0.1**	**0.2**	**0**	**0**	**0**	**0**	**0**	**0**
Black mould *Pilgeriella anacardii*	**0**	**0**	**0**	**0.1**	**0.1**	**0.2**	**0**	**0**	**0**	**0**	**0**	**0**
Leaf and nut blight (*Cryptosporiopsis sp.)*	**0**	**0**	**0**	**0.1**	**0.1**	**0.2**	**0**	**0**	**0**	**0**	**0**	**0**
Helopeltis bugs (*Helopeltis anacardii*	**0**	**0**	**0**	**0.1**	**0.1**	**0.2**	**0**	**0**	**0**	**0**	**0**	**0**
Red-banded thrips (*Selenothrip*	**0**	**0**	**0**	**0.1**	**0.1**	**0.2**	**0**	**0**	**0**	**0**	**0**	**0**

s rubrocinctus												
Cashew weevil (Mecocoryn us loripes)	**0**	**0**	**0**	**0.1**	**0.1**	**0.2**	**0**	**0**	**0**	**0**	**0**	**0**
Mealybugs*Pseudococcus longispinus*	**0**	**0**	**0**	**0.1**	**0.1**	**0.2**	**0**	**0**	**0**	**0**	**0**	**0**
Cashew stem girdler *(Paranalepte s reticulata)*	**0**	**0**	**0**	**0.1**	**0.1**	**0.2**	**0**	**0**	**0**	**0**	**0**	**0**
Any other disease and pest of economic importance	**0**	**0**	**0**	**0.1**	**0.1**	**0.2**	**0**	**0**	**0**	**0**	**0**	**0**

Preparation Standards

Parameter	**Tolerance (number of seedlings with abnormality per 1000 seedlings block)**							
Abnormality	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**
Leaf necrosis due to Powdery mildew *Oidium anacardii*	**0**	**0**	**1**	**2**	**-**	**-**	**-**	**2**
Black spots on leaves due to Anthracnose *(Colletotrichum gloeosporioides)*	**0**	**0**	**1**	**2**	**-**	**-**	**-**	**2**
Chlorotic spots due to Black mould *Pilgeriella anacardii*	**0**	**0**	**1**	**2**	**-**	**-**	**-**	**2**
Deformed leaves due to Helopeltis bugs (*Helopeltis anacardii)*	**0**	**0**	**1**	**2**	**-**	**-**	**-**	**2**
Bare tips and few young leaves due to Red-banded thrips	**0**	**0**	**1**	**2**	**-**	**-**	**-**	**2**

(*Selenothrips rubrocinctus*								
	Tolerance (maximum number of units outside the class range eg number of seedlings in 1000 seedling block)							
Preparation parameters	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**C3**
Number of nodes on the seedling	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
Minimum age of seedlings in days (60 days)	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
Height of seedling (25cm to 45 cm)	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
Parameter	**Maximum lot size (measure)**							
Lot sizes (Max number of units in standard measure to represent a single lot)	**BR**	**PB**	B	**C1**	**C2**	**C3**	**Std**	**QDSS**
	20000	**20000**	**20,000**	**20000**	**20000**	**20000**	**20000**	**20000**
Post Control standards	**Physical purity (%) 98%**		**Off types (no. of plants per 100 plants/ 1000 plants 0**		**Pests and diseases (tolerance limit) 0**			

FIELD AND LABORATORY STANDARDS FOR PRODUCTION OF CERTIFIED CASSAVA SEED CLASSES

Field Standards														
Cropping History (Seasons) A Seed crop of cassava shall not be eligible for certification if planted on land on which cassava was grown in the last two years.					Remarks Conventional field production, if possible, a clean virgin land disease and pest free, raised at ideal alt of between 0 – 2000 m, frost free, temperature 20 – 32^{0}C, rainfall 500 – 1500 mm pa well distributed, soils- well drainage soils, good water holding capacity pH 5.5 – 6.5 **Or** in green house Or Tissue culture laboratory.							
Isolation, metres (minimum)														
BR		PB		B			C1		C2		Std		QDSS	
50 m		50 m		30 m			15 m		15 m		15 m		10 m	
Off types of other cultivars (maximum No. per 1000 plants)														
BR		PB		B			C1		C2		Std		QDSS	
0		0		0			5		5		20		30	
Crop pest/disease tolerance (Tolerance %)														
	Field							Laboratory						
Diseases	BR	PB	B	C1	C2/C3	Std	QDSS	BR	PB	B	C1	C2	Std	QDSS
Cassava mosaic disease (CMD)	0	0	0	1	1	2	2	0	0	0	0	0	0	0
Cassava bacterial blight (CBB)	0	0	0	0	0	2	2	0	0	0	0	0	0	0
Cassava brown streak disease (CBSD) –	0	0	0	0	0	1	1	0	0	0	0	0	0	0
Pests														
Cassava mealybug (CM)	1	1	2	4	8	15	20	0	0	0	0	0	0	0
Cassava green mite (CGM) – Max incidence (%) (Number of plants with a severity score of above 2 on a scale of 1-5)	1	2	5	10	10	15	20	0	0	0	0	0	0	0
Scale insects	1	1	2	4	8	15	20	0	0	0	0	0	0	0
Preparation Standards (only have one class)														

Parameter	Tolerance (e.g., number of cuttings outside expected range per 1000 plant						
	BR	PB	B	C1	C2 /C 3	Std	QDSS
length of cutting (30 cm)	0	10	10	30	30	50	100
diameter of cutting (2.5 cm)	0	5	5	30	30	50	100
nodes/cutting (4 nodes)	0	10	10	50	50	100	150
Maximum damage (skin injury/node)	0	5	5	20	20	50	100
Parameter	Maximum lot size (measure per seedling lot)						
Lot sizes (Max number cuttings a single lot)	BR	PB	B	C1	C2	Std	QDSS
	200,000 stems	200,000 stems	200,000 stems	200,000 stems	200,000 stems	200,000 stems	200,000 stems
Post Control standards							
Physical purity (%)	100		100		100		100
Off types (no. of plants per 25000 plants	2%		2%		2%		2%
Pests and diseases (tolerance limit)	2%		2%		2%		2%

FIELD AND LABORATORY STANDARDS FOR PRODUCTION OF CERTIFIED COCONUT SEED CLASSES

Factor	Class		
	Pre – Basic	**Basic**	**Certified**
1. Land history			
Volunteer plants	0	0	0
2. Field inspection			
(a) minimum number of inspections for male and female	1	1	1
(b) minimum inspection for oil palm seedlings at nursery	1	1	1
3. Laboratory seed standards (%)			
(a) minimum pure seed	99	99	98
(b) maximum inert Matters	1	1	2
(c) minimum pre-germination	70	70	70
(d) minimum moisture Content	17	17	17
(e) maximum moisture content	22	22	22
4. Pre- germinated seed standard (cm)			
(a) maximum length of shoot	4	4	4
(b) minimum length of shoot	4	4	4
5. Nursery Standards (cm)			
(a) maximum potting material size in primary nursery- height	17	17	17
(b) maximum potting material size in primary nursery – width	8	8	8
(c) maximum potting material size in secondary nursery – height	38	38	38
(d) maximum potting material size in secondary nursery – width	24	24	24
(e) minimum distance between Seedlings (cm).	50	50	50
6. Specific requirements (%) 17			
(a) minimum genetic purity for male	99	98	97
(b) minimum genetic purity for female	99	98	97
(c) maximum off-type	1	2	3
7. Diseases and insect pests			

(a) Fungal infection (%)			
(i) Bole rot	0.1	1	1
(ii) Bud rot.	0.1	1	1
(b) Insect pest			
Number of Rhinoceros beetle (*Oxyceles rhinoceros*)	3	5	7

FIELD AND LABORATORY STANDARDS FOR PRODUCTION OF CERTIFIED COFFEE SEED CLASSES

Field Standards	
Cropping History (Seasons) Field should be free from Fusarium, Armillaria root rot (*Armillaria heimii*) and nematodes.	Remarks This is done predominantly on the disease resistant hybrid cultivars such as Ruiru 11. Altitude range from 1,200 to 2,100 m above sea level, Optimal temperature range: - 15ºC - 27ºC, well distributed rainfall of not less than 1000mm per year for East of Rift Valley and 1145mm for West of Rift Valley, free draining up to a depth of 1.5m to 3m in drier areas, fertile and slightly acidic (pH range 4.4-5.4) soils.

Isolation, metres (minimum)

BR	**PB**	**B**	**C1**	**C2**	**C3**	**Std**
15	**15**	**15**	**15**	**-**	**-**	**-**

Off types of other cultivars (%)

BR	**PB**	**B**	**C1**	**C2**	**C3**	**Std**
0	**0**	**0**	**0**	**-**	**-**	**-**

Crop pest/disease tolerance limit (Tolerance %,)

	Field						**Laboratory**							
Disease/pest	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**
Diseases Coffee Leaf Rust *(Hemileia* vastatrix)	0	0	0	0	-	-	-	0	0	**0**	**0**	-	-	-
Bacterial Blight of Coffee (BBC) *Pseudomonas syringae pv. Garcae*	0	0	0	0	-	-	-	0	0	**0**	**0**	-	-	-
Fusarium Bark Disease (FBD) *Fusarium stilboides*	0	0	0	0	-	-	-	0	0	**0**	**0**	-	-	-

Fusarium Root Disease (FRD) - *Fusarium solani*	0	0	0	0	-	-	-	0	0	**0**	**0**	-	-	-
Insect pests Coffee Thrips	0	0						0	0					
Diarthroth rips coffea Green scales *Coccus alpinus* Kenya mealy bug *Planococc us kenyae* And any other emerging diseases and pests of economic importanc e	1 1 1 0	1 1 1 0						1 1 0	1 1 0					

Processing Standards/ Preparation of material

Parameter		**Tolerance (%)**					
Abnor mality Crinkle leaf	**BR** 0	**PB** 0	**B** **0**	**C1** **0**	**C2**	**C3**	**Std**
		Tolerance (%)					
Prepar ation classes Single node (5-8 cm)	**BR** 1	**PB** 1	**B** **1**	**C1** **1**	**C2**	**C3**	**Std**
Seedling (2.5 shoot length/2 cm root length)	1	1	**1**	**1**			
height (of graftin g point	0	0	**5**	**10**			

15 cm)							
diameter of the root stock at grafting point(0.6 cm)	0	0	**5**	**10**			
diameter of graft at 10 cm above graft union (0.6cm)	0	0	**5**	**10**			
height of grafted seedling (25cm-45cm)	0	0	**5**	**10**			
Parameter		**Maximum lot size**					
Lot sizes (maximum number of seedlings in one lot	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**
Scions seedlings	100,000 100,000	100,000 100,000	100,000 100,000	100,000 100,000			
Post Control standards		**Physical purity (%)** 100%	**Off types (no. of plants per 100 plants/ 1000 plants** 0			**Pest and Diseases (tolerance limit)** 0%	

FIELD AND LABORATORY STANDARDS (FOR PRODUCTION OF BRACHARIA CERTIFIED SEED CLASSES) UROCHLOA (*UROCHLOA SPP*)

Field Standards												
Cropping History (Seasons) The previous cropping history of the field should not have had Napier grass or related species for 4 wet seasons					Remarks No incidence of smut disease							
Isolation, metres (minimum)												
BR		**PB**		**B**		**C1**		**C2**		**Std**		
200		**200**		**100**		**100**		**100**		**50**		
Off types of other cultivars (maximum per 100m squared)												
BR **0**		**PB** **0**		**B** **0**		**C1** **1**		**C2** **2**		**Std** **5**		
	Crop pest/disease tolerance (Tolerance %)											
	Field						**Laboratory**					
Disease /pest	**BR**	**PB**	**B**	**C1**	**C2**	**Std**	**BR**	**PB**	**B**	**C1**	**C2**	**Std**
Smut (*Ustilago* spp.)	0	0	0	0	0	0	0	0	0	0	0	0
Leaf spot *Bipolaris secali*)	0	0	0.02	0.1	0.1	0.1	0	0	0	0	0	0
Leaf rust (*Puccinia* spp)	0	0	0.02	0.1	0.1	0.1	0	0	0	0	0	0
Ergot (*Clavices ps* spp)	0	0	0	0	0	0	0	0	0	0	0	0
Preparation Standards												
Parameter	**Tolerance (number of rooted tillers per 100 pieces)s**											
Abnormality	**BR**	**PB**	**B**	**C1**	**C2**	**Std**						
Damaged tillers	**0**	**0**	**1**	**2**	**3**	**5**						
	Tolerance (maximum number of units outside the class range (number of rooted tillers per 100)											
Preparation	**BR**	**PB**	**B**	**C1**	**C2**	**Std**						
Root splits with 2-3 tillers	**0**	**0**	**5**	**5**	**5**	**10**						
Parameter	**Maximum lot size (measure)**											
Lot sizes (Max number of units in standard measure to represent a single lot)	**BR**	**PB**	**B**	**C1**	**C2**	**Std**						

Splits with 2-3 tiller	2,500	2,500	2,500	2,500	2,500	2,500
Post Control standards	**Physical purity (%)**		**Off types (no. of plants per 100 plants)**		**Pests and diseases (tolerance limit) 0 or 1 plant 1000 plant**	
	97		0		0	

FIELD AND LABORATORY STANDARDS FOR PRODUCTION OF CERTIFIED GRAFTED CITRUS (*Citrus spp*) SEEDLINGS

Field Standards	
Cropping History (Seasons) The distance between nursery and other citrus plants must be, at least, 20 meters. If Citrus canker has been registered in a period less than two years in orchards nearby the proposed nursery installation area, then a minimum distance of 1200 m must be maintained. The Citrus propagation structure should have been maintained clean for at least one month prior to introduction of the new crop. Where there is continuous cropping (Seedlings), regular cleaning/disinfection with mild detergents should be done and records of maintained.	Remarks The Location of the nursery must be in an area that is well drained and does not flood and potting materials must be placed on freely drained surfaces and where possible on elevated platforms to enable free drainage. Waste water must not flow through the nursery. Provision has to be made for sufficient furrows and / or drainage channels at the top end and sides of the nursery area (if located in a slopy area). It is advisable to have only one entrance access point where disinfection takes place. Where possible, it is advisable to use insect proof sheds to reduce the risk of entry of vector insects and pathogens for most citrus diseases and pests.

Isolation, metres (minimum) for Rootstock Varieties							
BR	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**
100	**100**	**100**	**25**	**25**	**25**	**20**	**10**

Isolation, metres (minimum) for Scion Varieties						
BR	**PB**	**B**	**C1**	**C2**	**Std**	
100	**20**	**20**	**20**	**20**	**20**	**10**

Isolation, metres (minimum) for Grafted Seedlings						
BR	**BR**	**BR**	**BR**	**BR**	**BR**	
20	**20**	**20**	**20**	**20**	**20**	**20**

Off types of other cultivars (maximum plants per 1000 seedling block						
BR	**PB**	**B**	**C1**	**C2**	**Std**	
0	**0**	**0**	**10**	**10**	**10**	**20**

	Crop pest/disease tolerance (Tolerance %, No. of plants) per 5,000 lot															
	Field								**Laboratory**							
Disease/pest	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**
Citrus Canker (*Xanthomonas citri* subsp *citri)*	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Citrus greening *(Liberobacter species)*	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Tristeza disease and Citrus Sudden Death (CSD)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Black spot (*Guignardia citri-carpa*)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Citrus whiteflies *(Dialeurodes citri)*	**0**	**0**	**0**	**5**	**10**	**10**	**10**	**20**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Citrus leafminer (Phyllocnistis citrella)	**0**	**0**	**0**	**0**	**5**	**10**	**10**	**20**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Black aphid of citrus (Toxoptera citricida), in addition to Aphis gossypii and Aphis spiraecola	**0**	**0**	**0**	**0**	**0**	**5**	**20**	**30**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Presence of foraging and sucking Pests such as Mites, Aphids caterpillars etc	**0**	**0**	**0**	**0**	**0**	**5**	**10**	**20**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Preparation Standards

Parameter	**Tolerance (Number of seedlings with abnormality per 1000 lot)**							
Abnormality	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**
Chlorotic seedlings from poor media composition	**0**	**0**	**0**	**0**	**10**	**20**	**20**	**100**
Stunted growing tips due to sucking by mites	**0**	**0**	**0**	**5**	**5**	**10**	**10**	**50**
Curled and stunted growth of leaves	**0**	**0**	**0**	**0**	**5**	**5**	**5**	**10**
More than 15% leaf perforations by leaf biting insects such as systate weevils	**0**	**0**	**0**	**5**	**5**	**10**	**10**	**40**
Bent stems (Below graft union)	**0**	**0**	**0**	**0**	**5**	**5**	**5**	**10**
Bent stems (Above graft union)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Tolerance (maximum number of units outside the class range eg number of seedlings in 1000 seedling block)

Preparation classes	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**

Seedling must be individually labelled indicating the variety of the scion	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**50**
Minimum size range of a vigorous disease and pest free grafted seedling of height 25 -35 cm above pot media level	**0**	**0**	**0**	**20**	**50**	**50**	**75**	**100**
Graft Union must be at least 15 cm above the media pot level, well healed with grafting tape already removed	**0**	**0**	**0**	**10**	**10**	**10**	**20**	**50**
Rootstock must be at least 8 mm (pencil thickness) at grafting point in a biodegradable potting bag of size at least 15 x 23 cm and perforated for drainage	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**50**

Parameter		**Maximum lot size (measure)**					
Lot sizes (Max number of units in standard measure to represent a single lot)	**BR**	**PB**	**B**	**C1**	**C2**	**Std**	**QDSS**
	500	**1,000**	**5,000**	**20,000**	**20,000**	**20,000**	**20,000**

Post Control standards	**Physical purity (%) per 1000**	**Off types (no. of plants per 100 plants/ 1000 plants**	**Pests and diseases (tolerance limit)**	**QDSS**

	98%	**0**	**0**	

Table 1: FIELD AND LABORATORY STANDARDS FOR PRODUCTION OF CERTIFIED MACADAMIA (*Macadamia integrifolia*) SEEDLINGS

Field Standards	
Cropping History (Seasons) The propagation structure should have been maintained clean for at least one month prior to introduction of the new crop. Where is continuous cropping (Seedlings), regular cleaning/disinfection with mild detergents should be done and records of maintained	Remarks Nursery must be located in an area that is well drained and does not flood and potting materials must be placed on freely drained surfaces and here possible on elevated platforms to enable free drainage

Isolation, metres (minimum) for Rootstock Varieties						
BR	**PB**	**B**	**C1**	**C2**	**Std**	**QDSS**
100	**100**	**100**	**50**	**50**	**50**	**10**
Isolation, metres (minimum) for Scion Varieties						
BR	**PB**	**B**	**C1**	**C2**	**Std**	**QDSS**
100	**100**	**50**	**20**	**20**	**15**	**10**
Isolation, metres (minimum) for Grafted Seedlings						
BR	**PB**	**B**	**C1**	**C2**	**Std**	**QDSS**
10	**10**	**10**	**10**	**10**	**10**	**10**
Off types of other cultivars (maximum per 1000 plants /seedling block)						
BR	**PB**	**B**	**C1**	**C2**	**Std**	**QDSS**
0	**0**	**0**	**5**	**5**	**10**	**20**

	Crop pest/disease tolerance (Tolerance - No. of plants/1000)													
	Field							**Laboratory**						
Disease/pest	**BR**	**PB**	**B**	**C1**	**C2**	**Std**	**QDSS**	**BR**	**PB**	**B**	**C1**	**C2**	**Std**	**QDSS**
Phytophthora root rot (*Phytophthora cinnamomi)*	**0**	**0**	**0**	**5**	**10**	**10**	**20**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Presence of foraging and sucking Pests such as Mites, Aphids caterpillars etc	**0**	**0**	**0**	**5**	**25**	**30**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Other diseases and Pests of economic Importance	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Preparation Standards							
Parameter	**Tolerance (Number of seedlings with abnormality per 1000 lot)**						
Abnormality	**BR**	**PB**	**B**		**C1**	**C2**	**Std**	**QDSS**
Chlorotic seedlings from poor	**0**	**0**	**0**	**10**	**25**	**25**	**25**	**100**

media composition								
Stunted growing tips due to sucking such as mites	**0**	**0**	**0**	**5**	**5**	**10**	**10**	**50**
More than 15% leaf perforations by leaf biting insects	**0**	**0**	**0**	**5**	**5**	**10**	**10**	**50**
Bent stems (Below graft union)	**0**	**0**	**0**	**0**	**5**	**5**	**5**	**10**
Bent stems (Above graft union)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
		Tolerance (maximum number of units outside the class range eg number of seedlings in 1000 seedling block)						
Preparation classes	**BR**	**PB**	**B**		**C1**	**C2**	**Std**	**QDSS**
Seedling must be individually labelled indicating the variety of the scion in a biodegradable potting bag of size (at least) 18 x 30 cm and perforated for drainage	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**50**
Minimum size range of a vigorous disease and pest free grafted seedling of height 30 - 45 cm above pot media level	**0**	**0**	**0**	**20**	**50**	**50**	**75**	**100**

Graft Union must be at least 15 cm above the media pot level, well healed with grafting tape already removed	**0**	**0**	**0**	**10**	**10**	**10**	**20**	**50**
Rootstock must be at least 8 mm (pencil thickness) at grafting point	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**50**
Parameter		**Maximum lot size (measure)**						
Lot sizes (Max number of units in standard measure to represent a single lot)	**BR**	**PB**	**B**		**C1**	**C2**	**Std**	**QDSS**
	500	**1000**	**5000**		**20,000**	**20,000**	**20,000**	**20,000**
Post Control standards	**Physical purity (%) per 1000**			**Off types (no. of plants per 100 plants/ 1000 plants**		**Pests and diseases (tolerance limit)**		
	98%			**0**		**0**		

FIELD AND LABORATORY STANDARDS (FOR PRODUCTION OF CERTIFIED PASSIONFRUIT *PASSIFLORA EDULIS, PASSIFLORA FLARVICARPA* SEEDLINGS AND SEED AS VEGETATIVE CLASSES)

Field Standards	
Cropping History (Seasons) • A crop should NOT have been grown in a field that has continuously been used for passion fruit production to avoid season or crop prone to Phytophthora roots rot.	**Remarks** • Proper management required to ensure continuous and adequate supply of new seeds and seedling as planting material.

Isolation, metres (minimum) varieties (applicable where no enclosure structures and temporal isolations are used)						
BR	**PB**	**B**	**C1**	**C2**	**Std**	**QDSS**
30	**30**	**30**	**10**	**-**	**-**	**10**
Isolation, metres (minimum) Clonal material						
BR	**PB**	**B**	**C1**	**C2**	**Std**	**QDSS**
30	**30**	**30**	**10**	**-**	**-**	**10**
Off types of other cultivars (maximum per 100 plants/ for passionfruit varieties)						
BR	**PB**	**B**	**C1**	**C2**	**Std**	**QDSS**
0	**0**	**0**	**1**	**-**	**-**	**10**
Off types of other cultivars (maximum per 100 plants/ or passionfruit clonal material)						
BR	**PB**	**B**	**C1**	**C2**	**Std**	**QDSS**
0	**0**	**0**	**2**	**-**	**-**	**10**

	Crop pest/disease tolerance (Tolerance %,)												
	Field						**Laboratory**						
Disease/pest %	**BR**	**PB**	**B**	**C1**	**C2**	**Std / QDSS**	**BR**	**PB**	**B**	**C1**	**C2**	**Std**	**QDSS**
Fusarium wilt (*Fusarium oxysporum fsp. passiflorae*)	**0**	**0**	**0**	**0**	**3**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Brown spot (*Alternaria passiflorae*)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Anthracnose *(Colletotrichum spp.)*	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Bacteria canker (*Xanthomonas axonopodis* pv *passiflorae*)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Passionfruit woodiness virus	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Passionfruit ringspot virus	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Passionfruit yellow mosaic virus	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Root rot (*Phytopthora spp)*	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Root knot nematodes (*Meloidogyne javanica*	**0**	**0**	**0**	**0**	**0.5**	**0.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Root lesion nematodes (*Pratylenchus brachyurus*)	**0**	**0**	**0**	**0**	**0.5**	**0.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Reniform nematodes(*Rotylenchulus reniformis*)	**0**	**0**	**0**	**0**	**0.5**	**0.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Powdery mildew *(Podospora spp)*	**0**	**0**	**0**	**0**	**0.2**	**0.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Spider / false spider mites *(Dolichotetranychus floridanus)*	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**1**	**1**	**0**
Other pests such as White flies, thrips, aphids, fruit flies, leaf hoppers , mealybugs , cutworms	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**1**	**1**	**0**
Any other emerging disease & pest of economic importance	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Preparation Standards							
Parameter	**Tolerance (eg %)**						
Abnormality	**BR**	**PB**	**B**	**C1**	**C2**	**Std**	**QDSS**
Stunted growth	0	0	0	0	-	-	5
Wilting	0	0	0	0	-	-	5
Leaf yellowing (Nutrient deficiency)	0	0	0	0	-	-	5
Leaf curling (Insect infestation)	0	0	0	0	-	-	5
Leaf spotting (Caused by fungal and bacterial diseases)	0	0	0	0	-	-	5
Tolerance (maximum number per 100 of seedlings outside the preparation class range)							
Preparation parameters Passion fruit seedlings are graded according to size and age thus	**BR**	**PB**	**B**	**C1**	**C2**	**Std**	QDSS

• **Small seedlings 15-30cm**	0	0	0	1	-	-	5
• **Medium seedlings 30-45 cm**	0	0	0	1	-	-	5
• **large seedlings** 45-60cm	0	0	0	1	-	-	5
• **stem diameter (pencil size 0.7cm)**	0	0	0	1	-	-	5
Parameter	**Maximum lot size (measure)**						
Lot sizes (Max number of seedlings in a single lot)	**BR**	**PB**	**B**	**C1**	**C2**	**Std**	**QDSS**
Seedlings per acre depending of spacing	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Post Control standards	**Physical purity (%)**		**Off types (no. of plants per 100 plants/ 1000 plants**		**Pests and diseases (tolerance limit)**		
	100		**0**		**0**		

FIELD AND LABORATORY STANDARDS (FOR PRODUCTION OF CERTIFIED PINEAPPLE SEED CLASSES)

Field Standards	
Cropping History (Seasons) A crop should NOT have been grown in a field that has continuously been used for pineapple production to in the last 2 years to avoid crop prone to Phytophthora root rot. Pineapple can be grown all year round making split/ suckers, slips or crown harvesting to be continuous	**Remarks** Prevent buildup of pests and diseases specific to pineapples.

Isolation, metres (minimum) varieties (applicable where no enclosure structures and temporal isolations are used)

BR	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**
100	**100**	**50**	**50**	**30**		**20**	**20**

Off types of other cultivars (maximum per 100 plants/ for pineapple varieties)

BR	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**
0	**0**	**0**	**1**	**2**	**4**	**6**	**6**

	Crop pest/disease tolerance (Tolerance %,)											
	Field						**Laboratory**					
Disease/pest %	**BR**	**PB**	**B**	**C1**	**C2/C3**	**Std/QDSS**	**BR**	**PB**	**B**	**C1**	**C2/C3**	**Std/QDSS**
Pineapple mealybug wilt (PMW) associated by pink (*Dysmicoccus brevipes)* and grey (mealy bugs *Dysmicoccus neobrevipes*)respectively	**0**	**0**	**0**	**0**	**3**	**3**	**0**	**0**	**0**	**0**	**0**	**0**
Phytophthora heart/ top rot caused (*Phytopthora cinnamomi*, *Phytopthora nicotianae*)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Phytopthora (*Phytopthora cinnamomi*)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Fusariosis (*Fusarium gittiforme*)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Base/Butt rot / white blister/ black rot (*Chalara paradoxa*)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Fruit let core rot / green eye and interfruitlet corking (*Penicillium funiculosum*)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Pineapple fruit caterpillar (*Thecla basilides*)	**0**	**0**	**0**	**0**	**0.5**	**0.5**	**0**	**0**	**0**	**0**	**0**	**0**
Root knot nematodes (*Meloidogyne javanica*)	**0**	**0**	**0**	**0**	**0.5**	**0.5**	**0**	**0**	**0**	**0**	**0**	**0**
Root lesion nematodes (*Pratylenchus brachyurus*)	**0**	**0**	**0**	**0**	**0.5**	**0.5**	**0**	**0**	**0**	**0**	**0**	**0**
Reniform nematodes(*Rotylenchulus reniformis*)	**0**	**0**	**0**	**0**	**0.5**	**0.5**	**0**	**0**	**0**	**0**	**0**	**0**
Marbling caused by *Acetobacter spp.*	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**
Yellow spot caused by tomato spotted wilt virus,	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0.5**	**1**
Red spider / false spider mites *(Dolichotetranychus floridanus)*	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**1**	**1**
Other pests such as thrips, aphids, fruit borer	**0**	**0**	**0**	**1**	**1**	**2**	**0**	**0**	**0**	**1**	**1**	**2**
Any other emerging	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

disease & pest of economic importance												

Preparation Standards								
Parameter	**Tolerance (eg %)**							
Abnormality	**BR**	**PB**	**B**	**C 1**	**C2**	**C3**	**Std**	**QD SS**
Crown abnormalities include (Irregular crown sizes, rots and decays, insufficient pulp / flesh making them less viable, disease symptoms, pest damage)	0	0	0	0	1	2	2	3
Abnormalities on Splits include (rots and decay, insect damage, wilting and drying of splits, deformed leaves or stems, weak unhealthy foliage, shriveled crowns)	0	0	0	0	0	0	0	0
	Tolerance (maximum number of units per 100 outside the preparation grade range)							
Preparation parameters Grading may be based on	BR	PB	B	C 1	C 2	C3	Std	QDS S
• Weight of splits 400-600g	0	0	0	2	2	3	4	6
• Weight suckers/slip 350-450g	0	0	0	2	2	3	4	6
• Length of splits / suckers 20-30cm	0	0	0	2	2	3	4	6
Parameter	**Maximum lot size (measure)**							

Lot sizes (Max number of units a single lot)	BR	PB	B	C1	C2	C3	Std	QDSS
	23,000	23,000	23,000	23,000	23,000	23,000	23000	23,000
Post Control standards	Physical purity (%)		Off types		Pests and diseases (tolerance limit)			
	100		0		0			

FIELD AND LABORATORY STANDARDS (FOR PRODUCTION OF CERTIFIED PYRETHRUM VEGETATIVE SEED CLASSES)

Field Standards												
Cropping History (Seasons) A crop from the same species should NOT have been grown in that field in the previous season. or crop prone to fusarium wilt disease infection Crop rotation is encouraged						**Remarks** To prevent the buildup of pests and diseases specific to pyrethrum. Maintenance of varietal purity Management of soil fertility					
Isolation, metres (minimum) varieties											
BR **10**		**PB** **10**	**B** **10**	**C1** **5**	**C2** **5**	**Std** **5**					
Isolation, metres (minimum) Clonal material											
BR **5**		**PB** **5**	**B** **5**	**C1** **3**	**C2** **3**	**Std** **3**					
Off types of other cultivars (maximum per 100 plants/ for pyrethrum varieties)											
BR **0**		**PB** **0**	**B** **0**	**C1** **1**	**C2** **2**	**Std** **2**					
Off types of other cultivars (maximum per 100 plants/ or pyrethrum clonal material)											
BR **0**		**PB** **0**	**B** **0**	**C1** **2**	**C2** **5**	**Std** **5**					
	Crop pest/disease tolerance (Tolerance %,)											
	Field						**Laboratory**					
Disease/pest %	**BR**	**PB**	**B**	**C1**	**C2**	**Std**	**BR**	**PB**	**B**	**C1**	**C2**	**Std**
Fusarium wilt (*Fusarium graminearum, Fusariumoxysporum,* and *Fusarium solani)*	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Rhizotonia spp	**0**	**0**	**0**	**0.5**	**2**	**3**	**0**	**0**	**0**	**0**	**1**	**1**
Bud disease (*Ramularia bellunensis*, *Alternaria spp*, and *Asychocyta spp)*	**0**	**0**	**0**	**0.5**	**2**	**3**	**0**	**0**	**0**	**1**	**2**	**2**
Aschocyta spp	**0**	**0**	**0**	**1**	**2**	**2**	**0**	**0**	**0**	**0**	**0.5**	**1**
Pythium *spp*	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0.5**	**1**

Root knot nematode	**0**	**0**	**0**	**0**	**0.5**	**0.5**	**0**	**0**	**0**	**0**	**0**	**0**
Mites (Red Spider mites)	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**1**	**1**
Thrips (onion thrips)	**0**	**0**	**0**	**1**	**2**	**2**	**0**	**0**	**0**	**1**	**1**	**2**
Aphids (green Peach aphid)	**0**	**0**	**0**	**1**	**2**	**2**	**0**	**0**	**0**	**1**	**2**	**2**
Any other emerging disease & pest of economic importance	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Processing Standards						
Parameter	**Tolerance (eg %)**					
Abnormality	**BR**	**PB**	**B**	**C1**	**C2**	**Std**
Crown	0	0	0	0	1	1
Root	0	0	0	0	1	1
	Tolerance (maximum number of units outside the class range eg number of tubers per 50kg bag)					
Processing classes Eg: Class 1 (minimum-maximum size range within class) Height, vigor/ bush size/ seedling size **Class 2 minimum-maximum size range within class height, vigor bush size, seedling size**	**BR**	**PB**	**B**	**C1**	**C2**	**Std**
Parameter	**Maximum lot size (measure)**					
Lot sizes (Max number of units in standard measure to represent a single lot)	**BR**	**PB**	**B**	**C1**	**C2**	**Std**
	250,000 **22,000**	**250,000**	**250,000**	**250,000**	**250,000**	**250,000**

Post Control standards	Physical purity (%)	Off types (no. of plants per 100 plants/ 1000 plants	Pests and diseases (tolerance limit)
	100	**0**	**0**

TABLE 1: FIELD AND LABORATORY STANDARDS FOR PRODUCTION OF CERTIFIED STRAWBERRY (*Fragraria X ananassa*) RUNNER'S VEGETATIVE CLASSES

Field Standards													
Cropping History (Seasons) A crop should NOT have been grown in a field that has continuously been used for pineapple production to avoid season or crop prone to Phytophthora root rot							**Remarks** In case of potted plants, keen care to avoid contamination and cross infection by pests and diseases						
Isolation, metres for strawberry varieties (Applicable where no enclosure structures and temporal isolations are used)													
BR 50		**PB 50**		**B 50**			**C1 50**		**C2 -**		**Std 25**		**QDSS 25**
Isolation, metres (minimum) Clonal material/runners/stolons from other varieties													
BR 5		**PB 5**		**B 5**			**C1 5**		**C2 3**		**Std 4**		**QDSS 4**
Off types of other cultivars (maximum per 100 plants/ for strawberry varieties)													
BR 0		**PB 0**		**B 0**			**C1 1**		**C2 3**		**Std 4**		**QDSS 2**
Off types of other cultivars (maximum per 100 plants/ or strawberry clonal material)													
BR 0		**PB 0**		**B 0**			**C1 2**		**C2 3**		**Std 4**		**QDSS5**
Allowable cycles for clonal regeneration (Number of cycles)													
BR 0		**PB 0**		**B 0**			**C1 3**		**C2 4**		**Std 5**		**QDSS8**
	Crop pest/disease tolerance (Tolerance %,)												
	Field							**Laboratory**					
Disease/pest %	**BR**	**PB**	**B**	**C1**	**C2**	**Std**	**QDSS**	**BR**	**PB**	**B**	**C1**	**C2**	**Std**	**QDSS**
Angular Leaf Spot (*Xanthomonas fragariae*)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Verticilliu m Wilt (*Verticillium spp*.)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Crown Rot (*Phytophthora spp*.)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Anthracnose (*Colletotrichum spp.*)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Botrytis Fruit Rot (*Botrytis cinerea*)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Powdery Mildew (*Podosphaera spp.*)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Leaf Spot (*Mycosphaerella fragariae*)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Strawberry Mottle Virus (SMoV)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Strawberry Mild Yellow Edge Virus (SMYEV)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Strawberry Crinkle Virus (SCV)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Strawberry Crown Moth (*Synanthedon bibionipennis*)	**0**	**0**	**0**	**1**	**1**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Two-Spotted Spider Mite (Tetranychus urticae)	**0**	**0**	**0**	**1**	**1**	**3**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Strawberry Bud Weevil (*Anthonomus signatus*)	**0**	**0**	**0**	**1**	**1**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Other pests such as thrips,	**0**	**0**	**0**	**1**	**1**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

aphids, Whiteflies, Leafhoppers and cutworms														
Any other emerging disease & pest of economic importance	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Preparation Standards														
Parameter	**Tolerance (eg %)**													
Abnormality	**BR**		**PB**		**B**			**C1**		**C2**		**Std**		**QDSS**
Runners/stolons (excessive elongation, desiccation, die back)	0		0		0			0		1		2		4
Crowns (crown rot, malformation, crown gall, desiccation)	0		0		0			0		1		2		4
	Tolerance (maximum number of units outside the class range e.g. number of splits/runners)													
Preparation grades: **Weight (minimum - maximum size range within class) Height, vigor/ bush size/ seedling size** **Class 2**	**BR**		**PB**		**B**			**C1** 500g-800g weight splits		**C2** Splits about 20 cm long, vigorous growth , free of pests and diseases		**Std** Suckers / splits weighing between 350 - 450 g or 350 to 400g		

minimum-maximum size range within class height, vigor bush size, seedling size							
Parameter	**Maximum lot size (runners/stolons)**						
Lot sizes (Max number of runner/stolons to represent a single lot)	**BR**	**PB**	**B**	**C1**	**C2**	**Std**	**QDSS**
Bare root	4000	4000	4000	4000	4000	4000	4000
Potted	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Post Control standards	**Physical purity (%)**		**Off types (no. of plants per 100 plants/ 1000 plants**		**Pests and diseases (tolerance limit)**		
	100		**0**		**0**		

FIELD REQUIREMENT STANDARDS (FOR PRODUCTION OF CERTIFIED SEED CLASSES) SUGARCANE – (*SACCHARUM OFFICINARUM* SPP)

Field Standards							
Land History The previous cropping history of the field should not have had sugarcane in the last two seasons			Remarks No Sugarcane residues and drainage from other sugarcane fields				
Isolation, metres (minimum)							
Breeder (BR)	**Pre-basic (PB)**	**Basic (B)**	**Foundation (C1)**	**Commercial (C2) Plant crop**	**Ratoon I C3**		
10	**10**	**10**	**5**	**3**	**5**		
Off types of other cultivars (maximum per 100 plants)							
BR 0	**PB 0**	**B 0**	**C1 0**	**C2 0**	**C3 0**		

Plant affected by designated pest/disease tolerance (%)							
	Field						**Remarks**
Disease/pest	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	
Red rot (*Glomerella tucumanensis* Speg	0	0	0.	0	0	0	A minimum of three inspections shall be made as follows: **1.** Inspection I The first inspection shall be made at 45-60 days after planting in order verify isolation and detect volunteer plants, designated diseases and pests and other relevant factors. **2.** Inspection II The second inspection shall be made at 120-130 days after planting to verify off-type, designated diseases and pests and other relevant factors. **3.** Inspection III The third inspection shall be made 30 days prior to the harvesting of seed canes to verify the age of cane, off-types, designated diseases and pests and other relevant factor
Smut (*ustilago. Scitaminea sydow*	0	0	0	0.02	0.5*	0.5*	
Ratoon stunting disease (RSD)	0	0	0	0	0	0	
. Leaf scald (*Xanthomonas albilineans* (Ashby)Dowso	0	0	0	0.01*	0.05*	0.05*	
Shoot borer (*Scirpophaga excerptalis Wlk*.)	0	0	0	5	5	5	**KEY** * Subject to immediate rouging of the whole clump ** In areas where the presence of the pest has not been recorded. + It gives around 0.5%-affected

Stalk borer (Eldana saccharina .)	0	0	0	5.0+	5.0*	5.0*	buds
Scale insect (*Aulacaps is tegalensis*	0	0	0	5	5	5	
Mealy bug. (*Sacchari phagus sacchari Cockerell*)	0	0	0	5	5	5	

Preparation Standards								
Parameter	**Tolerance (number of cane setts nodes with abnormality per 100 plants)**							
	BR	**PB**	**B**	**C1**	**C2**	**C3**		
Source of planting material	Plant crop	Plant crop	**Plant crop**	**Hot water treated plant crop**	**Plant crop and ratoon l**	**None**		
Setts with damaged nodes	0	0	**0**	**5**	**5**	**5**		
Lot sizes (Max number of setts to represent a single lot)	10,000	10,000	**10,000**	**10, 000**	**10,000**	**10, 000**		
Post Control standards	**Physical purity (%)**		**Off types (no. of plants per 100 plants/ 1000 plants**			**Pests and diseases (tolerance limit)**		
	100		**0**			**0**		

FIELD AND LABORATORY STANDARDS (FOR PRODUCTION OF CERTIFIED SEED CLASSES) MIRAA (*CATHA EDULIS*)

Field Standards													
Cropping History (Seasons) **The land should not have miraa or related species for the past 2 seasons**						Remarks **Make sure there are no diseases and insect pests**							
Isolation, metres (minimum)													
BR **25**		PB **25**		B **25**		C1 **20**		C 2 **20**	**C 3 20**	Std **20**		**QDSS 20**	
Off types of other cultivars (maximum per 100 seedlings)													
BR **0**		PB **0**		B **0**		C1 **2**		C 2 **2**	**2**	Std **5**		**QDSS 5**	
	Crop pest/disease tolerance (%)												
	Field						**Laboratory**						
Disease/insect pest/Disorders	**BR**	**PB**	**B**	**C1**	**C2/C3**	**Std/QDSS**	**BR**	**PB**	**B**	**C1**	**C2/C3**	**Std/QDSS**	
Powdery mildew(3)	**5**	**5**	**5**	**10**	**10**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	
Downy mildew(3)	**5**	**5**	**5**	**10**	**10**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	
Black leaf spots (*Dillsiell apollaccii*)(3)	**5**	**5**	**5**	**10**	**10**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	
Brown leaf spots(3)	**5**	**5**	**5**	**10**	**10**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	
Stem and twig galls(3)	**0**	**0**	**1**	**1**	**2**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	
Leaf fall(3)	**0**	**0**	**1**	**1**	**2**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	
Leaf crinkling (3)	**5**	**5**	**5**	**10**	**10**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	
Armillaria root rot(3)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	
Blight(3)	**5**	**5**	**5**	**10**	**10**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	
Leaf rusts(3)	**5**	**5**	**5**	**10**	**10**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	

Leaf curls[3]	**5**	**5**	**5**	**10**	**10**	**15**	**0**	**0**	**0**	**0**	**0**	**0**
Chafer grubs[3]	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Plant parasitic nematodes[3]	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Red spider mites[3]	**5**	**5**	**5**	**10**	**10**	**15**	**0**	**0**	**0**	**0**	**0**	**0**
Thrips[3]	**5**	**5**	**5**	**10**	**10**	**15**	**0**	**0**	**0**	**0**	**0**	**0**
Scale insects[3]	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Leaf weevils[3]	**5**	**5**	**5**	**10**	**10**	**15**	**0**	**0**	**0**	**0**	**0**	**0**
Aphids[3]	**5**	**5**	**5**	**10**	**10**	**15**	**0**	**0**	**0**	**0**	**0**	**0**
White flies[3]	**5**	**5**	**5**	**10**	**10**	**15**	**0**	**0**	**0**	**0**	**0**	**0**
Caterpillars[3]	**0**	**0**	**1**	**2**	**2**	**5**	**0**	**0**	**0**	**0**	**0**	**0**
Leaf skelotonizer[3]	**0**	**0**	**0**	**1**	**1**	**5**	**0**	**0**	**0**	**0**	**0**	**0**
Any other disease/insect pest of economic importance	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Preparation Standards												
Parameter	**Tolerance (number of miraa seedlings with abnormalities per 100 seedlings)**											
Abnormality (specify the abnormality)	BR **0**	PB **0**	B **2**	C1 **5**	C2/C3 **5**	Std/QDSS **10**						
	Tolerance (maximum number of units outside the class range per 100 seedlings)											

Preparation classes **Size 1 (5cm – 15cm)**	**BR** **0**	**PB** **0**	**B** **0**	**C1** **2**	**C2/C3** **2**	**Std/QDSS** **5**
Size 2 (15.1cm – 30cm)	**0**	**0**	**0**	**2**	**2**	**5**
Size 3 (30.1cm – 50cm)	**0**	**0**	**0**	**2**	**2**	**5**
Parameter	**Maximum lot size (measure)**					
Lot sizes (Max number of seedlings a single lot)	**BR**	**PB**	**B**	**C1**	**C2/C3**	**Std/QDSS**
	25,000	**25,000**	**25,000**	**25,000**	**25,000**	**25,000**
Post Control standards	Physical purity (%) **≥ 98**		Off types (no. of plants per 100 plants) **0**		Pests and diseases (tolerance limit) **0%**	

NB: A superscript after an item represents a reference in the reference list.

FIELD STANDARDS FOR propagation of Oil Palm - *Eleasi guinneesis L.* Certified SEEDLINGS

Factor	Class		
	Pre – Basic	**Basic**	**Certified**
1. Land history			
Volunteer plants	0	0	0
2. Field inspection			
(a) minimum number of inspections for male and female	1	1	1
(b) minimum inspection for oil palm seedlings at nursery	1	1	1
3. Laboratory seed standards (%)			
(a) minimum pure seed	99	99	98
(b) maximum inert Matters	1	1	2
(c) minimum pre-germination	70	70	70
(d) minimum moisture Content	17	17	17
(e) maximum moisture content	22	22	22
4. Pre- germinated seed standard (cm)			
(a) maximum length of shoot	4	4	4
(b) minimum length of shoot	4	4	4
5. Nursery Standards (cm)			
(a) maximum potting material size in primary nursery- height	17	17	17
(b) maximum potting material size in primary nursery – width	8	8	8
(c) maximum potting material size in secondary nursery – height	38	38	38
(d) maximum potting material size in secondary nursery – width	24	24	24
(e) minimum distance between Seedlings (cm).	50	50	50
6. Specific requirements (%) 17			

FIELD AND LABORATORY STANDARDS FOR PRODUCTION OF CERTIFIED SEED POTATO (*SOLANUM TUBEROSUM*) CLASSES

Field Standards																
Cropping History (Seasons) 6 without a previous potato or Solanaceae family crops							**Remarks No incidence of Potato Cyst Nematode, Bacterial Wilt, Blackleg**									
Isolation, metres (minimum)																
BR		**PB**		**B**		**C1**		**C2**		**C3**		**Std**		**QDSS**		
From ware crop	**50**	**50**		**50**		**50**		**50**		**50**		**20**		**20**		
From seed potato crops	**5**	**5**		**5**		**2**		**2**		**2**		**2**		**2**		
Off types of other cultivars (maximum per 100 plants)																
BR		**PB**		**B**		**C1**		**C2**		**C3**		**Std**		**QDSS**		
0		**0**		**2**		**2**		**3**		**3**		**3**		**3**		
	Crop pest/disease tolerance (Tolerance %, No. of plants)															
	Field						**Laboratory**									
Disease/pest	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**
Blackleg (*Pectobacterium* spp and *Dickeya* spp)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Severe virus disease e.g. leaf roll, Y group of viruses, severe mosaic	**0**	**1**	**4**	**8**	**10**	**10**	**10**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Mild Mosaic visible in the field (e.g. PVX, PVS)	**0**	**5**	**10**	**15**	**20**	**20**	**30**	**30**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Fusarium wilt	**0**	**0**	**0**	**2**	**5**	**5**	**5**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Bacterial wilt or Brown rot (*Ralstonia*	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

spp)																
Wart disease (*Synchtrium endobioticum)*	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Nematodes (*Meloidogyne spp*; *Ditylenchus* spp)	**0**	**0**	**2**	**3**	**4**	**4**	**4**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Potato Cyst nematode *(Globodera spp)*	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Ring rot **(***Clavibactor michiganensis sp sepedonicum***)**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Potato spndle tuber viroid	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Phytoplasma diseases e.g. potato stolbur and potato purple top	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Processing Standards																
Parameter	**Tolerance (Number of tubers with abnormality per 50kg bag)**															
Abnormality	**BR**		**PB**		**B**		**C1**		**C2**		**C3**		**Std**			**QDSS**
Scab (*Streptomyces spp, Spongospora* subterranean) no more than 50% tuber covered	**0**		**10**		**25**		**50**		**50**		**50**		**75**			**75**

Rhizoctonia **(***Rhizoctonia solani***)**	**0**	**5**	**10**	**30**	**30**	**30**	**50**	**50**
Pink Rot (*Phytophthora erythroseptica*)	**0**	**0**	**0**	**1**	**1**	**1**	**1**	**1**
Tuber Moth damage	**0**	**0**	**2**	**5**	**5**	**5**	**8**	**8**
Mis-shapen and damaged tubers	**0**	**0**	**0**	**2**	**5**	**5**	**10**	**10**
Millipede damage	**0**	**0**	**0**	**5**	**5**	**5**	**8**	**8**
Late blight (*Phytophthora infestans*)	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**5**
Early Blight (Alternaria solani) and Dry rot (*Fusarium* spp *Phoma* spp)	**0**	**0**	**6**	**6**	**6**	**6**	**10**	**10**
Nematodes (*Meloidogyne* spp. and *Ditylenchus* spp)	**0**	**0**	**0**	**5**	**5**	**5**	**5**	**5**
	Tolerance (maximum number of tubers outside the class range eg number of tubers per 50kg bag)							
Preparation classes	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**
In vitro plantlets/ rooted apical cuttings								
Minitubers (15.0-27.0 mm)	**5**	**5**			-	-	-	-
Size I (28-	**5**	**5**	**5**	**5**	**5**	**5**	**10**	**10**

45mm)								
Size II (46- 55 mm)	**5**	**5**	**5**	**5**	**5**	**5**	**10**	**10**
Parameter	**Maximum lot size (measure)**							
Lot sizes)	**/ BR**	**PB**	**B**	**C1**	**C2**		**Std**	
In vitro plants lets/rooted apical cuttings 400,000 plants	400,000	400,000		-	-		-	
Mini-tubers (20 tones)	400,000	400,000		-	-		-	
Size I & Size II	**40 tones**	**40 tones**	**40 tones**	**40 tones**	**40 tones**		**40 tones**	
Post Control standards	**Physical purity (%)**		**Off types (no. of plants per 100 plants/ 1000 plants**		**Pests and diseases (tolerance limit)**			
	100		0		Zero tolerance to Bacterial wilt, *Erwinia* sp, PCN			

FIELD AND LABORATORY STANDARDS (FOR PRODUCTION OF BANANA (*Musa sp*) CERTIFIED SEED CLASSES)

Field Standards							
Cropping History (Seasons) Free from *Panama Fusarium Oxysporium* (FOC), No Banana bunch top virus (BBTV), No Banana Xanthomonas wilt *Xanthomonas Campestris* pv *Musacearum* (BXW) for the last three years, No nematodes, No weevils.	Remarks Conventional field production, if possible, on a clean virgin land disease and pest free, optimal alt of between 0 – 2100 m asl, frost free, temperature 18 – 28^{0}C, rainfall 1200 – 2500 mm pa well distributed, soils- well drainage soils with high O.M, good water holding capacity pH 6.0 – 7.5 **Or** in green house **Or** Tissue culture laboratory,						
Isolation, metres (minimum)							
BR	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**
50	50	50	25	25	25	25	25
Off types of other cultivars (maximum per maximum 1000 plants)							
BR	**PB**	**B**	**C1**	**C2**	**Std**	**QDSS**	
0	**0.5 %**	**0.5%**	**1%**	**1%**	**2 %**	**2%**	

	Crop pest/disease tolerance (Tolerance %, No. of plants)												
	Field						**Laboratory**						
Disease/ pest	**BR**	**PB**	**B**	**C1**	**C2/ C3**	**Std/ QDSS**	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**
Panama disease *Fusarium Oxysporium* (Tropical race 4)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Panama disease *Fusarium oxysporum* f.sp. cubense	**0**	**0**	**0**	**0.1**	**0.1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Banana Xanthomonas wilt *Xanthomonas Camptris* pv *Musacearum* (BXW)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Black Sigatoka *Mycosphaerella fijiensis*	**0**	**0**	**0**	**0.1**	**0.1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Yellow sigatoka *Mycosphaerella musicola*	**0**	**0**	**0**	**0.1**	**0.1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Banana bunch top virus (BBTV),	**0**	**0**	**0**	**0.5**	**0.5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Nematodes Banana	**0**	**0**	**0**	**0.5**	**0.5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Banana bract mosaic virus	**0**	**0**	**0**	**0.5**	**0.5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
weevils	**0**	**0**	**0**	**0.5**	**0.5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Preparation Standards							
Parameter	**Tolerance (e.g., number of suckers with abnormality per 1000plant**						
Abnormality	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**
Off types	**0.5 %**	**0.5 %**	**0.5%**	**1%**	**1%**	**1 %**	**2%**

	Tolerance (maximum number of units outside the class range e.g., number of suckers per seedling lot							
Preparation classes Eg: Class 1 (minimum-maximum size range within class) **Class 2 minimum-maximum size range within class**	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**
Banana Seedlings	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
suckers								

Parameter	**Maximum lot size (measure per seedling lot)**							
Lot sizes (Max number of seedlings a	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**

single lot)								
	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Suckers	2000	2000	2000	2000	2000	2000	2000	2000
Post Control standards	**Physical purity (%)**		**Off types (no. of plants per 25000 plants**		**Pests and diseases (tolerance limit)**			
	100		**2%**		**2%**			

FIELD AND LABORATORY STANDARDS (FOR PRODUCTION OF CERTIFIED SEED CLASSES)
KIKUYU GRASS (*PENNISETUM CLANDESSTINUM*)

Field Standards														
Cropping History (Seasons) The previous cropping history of the field should not have had Napier grass or related species for 4 seasons						Remarks No incidence of Kikuyu Yellows disease								
Isolation, metres (minimum)														
BR		**PB**		**B**		**C1**		**C2**		**C3**		**Std**		
50		**50**		**50**		**25**		**25**		**25**		**12**		
Off types of other cultivars (maximum per 100m squared)														
BR		**PB**		**B**		**C1**		**C2**		C3		**Std**		
0		**0**		**0**		**1**		**2**		2		**5**		
Crop pest/disease tolerance (%)														
	Field							**Laboratory**						
Disease/pest	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**
Kikuyu yellows disease (*Verrucalvus flavofaciens*)	**0**	**0**	0.02	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
Any other disease of economic importance	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preparation Standards							
Parameter	**Tolerance (number of runners with abnormality per 100 pieces))**						
Abnormality	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**
Damaged runners (bruised)	0	0	0	2	4	4	6
	Tolerance (maximum number of units outside the class range (number of runners per 100)						
Preparation	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**
Runners 15 – 20 cm long	0	0	0	2	4	4	8
with 3-4 rooted nodes	0	0	0	2	4	4	8
Parameter	**Maximum lot size (number of runners)**						
Lot sizes (Max number of units in standard measure to	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**

represent a single lot)								
Runners 15 – 20 cm long with 3-4 rooted nodes	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**	**200,000**
Post Control standards	**Physical purity (%)**		**Off types (no. of plants per 1000 plants**		**Pests and diseases (tolerance limit)**			
	98		**0**		**0**			

FIELD AND LABORATORY STANDARDS (FOR PRODUCTION OF CERTIFIED SEED CLASSES)
NAPIER GRASS – (*CENCHRUS PURPUREUS* SYNONYM *PENNISETUM PURPUREUM*)

Field Standards							
Cropping History (Seasons) The previous cropping history of the field should not have had Napier grass or related species for 4 seasons (2 years)		Remarks No incidence of Napier smut and Napier stunt diseases incidence					
Isolation, metres (minimum)							
BR	**PB**	**B**	**C1**	**C 2**	**C 3**	**Std**	**QDSS**
100	**100**	**50**	**50**	**30**	**20**	**10**	**10**
Off types of other cultivars (maximum per 100 plants)							
BR 0	**PB 0**	**B 0**	**C1 1**	**C 2 2**	**C 3 2**	**Std 5**	**QDSS 5**

Crop pest/disease tolerance (%)

	Field								**Laboratory**							
Disease/pest	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**
Napier head smut (*Ustilago kamerunie nsis*)	0	0	0.02	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0
Napier stunt disease (*caused by bacterium phyto*	0	0	0.05	0.5	0.5	0.5	0.5	0.5	0	0	0	0	0	0	0	0

plasma)																
Any other disease of economic importance	0	0	0	0	0	0	0		0	0	0	0	0	0	0	

Preparation Standards								
Parameter	**Tolerance (number of canes and rooted tiller with abnormality per 100 plants)**							
	BR	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**
Damaged buds on cane (by eg wild animals)	0	0	**0**	**2**	**5**	**5**	**10**	**20**
Rooted tillers damaged (by eg mole [*Talpidae spp*.])	0	0	**0**	**2**	**5**	**5**	**10**	**20**

Tolerance (maximum number of canes and rooted tillers outside the class range per 100 pieces)								
Preparation	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**	**QDSS**
Canes with 3 nodes	**0**	**0**	**0**	**1**	**3**	**5**	**5**	**10**
Root splits with 2-3 tillers	**0**	**0**	**0**	**1**	**3**	**5**	**10**	**10**

Parameter	**Maximum lot size (number of cane and number of rooted tillers)**						
Lot sizes (Max number of units	**BR**	**PB**	**B**	**C1**	**C2**	**C3**	**Std**

in standard measure to represent a single lot)							
Canes with 2-3 nodes	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Root splits with 2-3 tillers	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Post Control standards	**Physical purity (%)**		**Off types (no. of plants per 100 plants)**		**Pests and diseases (tolerance limit)**		
	99.7		0		0		

FIELD AND LABORATORY STANDARDS (FOR PRODUCTION OF CERTIFIED SEED CLASSES) OF SWEETPOTATO

Species	Cropping History (Seasons)	Remarks
Sweet potato	3 seasons without sweet potato crop	Minimize disease transmission through volunteer plants

Species	Isolation, metres (minimum)								Off-types of other cultivars/100 plants							
	BR	PB	B	C1	C2	C3	Standard	QDSS	BR	PB	B	C1	C2	C3	Std	QDSS
Sweet potato (from commercial crops)	100	100	100	50	50	50	20	20	0	0	0	5	5	5	5	10
Sweet potato (isolation from other seed crops	10	10	10	5	5	5	5	3								

Disease and pest tolerance (include parameters for laboratory)

Crop	Disease/Pest	Maximum number infected/infested plants per 100 plant or 30 metre square							
		BR	PB	B	C1	C2	C3	Std	QDSS
Sweet potato	Fusarium Wilt (*Fusarium oxysporum* f. sp. *batatas)*	0	0	0	5	5	5	10	12
	Sweet potato (Bacterial) wilt (Scientific name)	0	0	0	1	3	3	5	10
	Soil rot* (*Actinomyces ipomoea)* Sweet potato weevil.	2	2	2	5	7	9	12	15
	Mosaic disease.	0	0	0	5	7	9	12	15
	Sweet potato virus disease.	0	0	0	0	1	2	4	6
	Sweet potato feathery mottle virus.	0	0	0	2	4	6	10	15
Pests	Weevils ???								
	*A vine crop may be rejected on the basis of serious field infestations by other pests such as nematodes and beetles.								

Preparation and Packaging standards (use same format)

Crop	Parameter	Tolerance % (all classes)
Sweet potato	Minimum length (vine)	20cm
	Minimum number of live (eyes) nodes	5
	Minimum diameter	0.5-1cm
	Maximum damaged nodes %	<5
	Number of leaves per 20 cm length	2-5

Maximum lot sizes

Crop			**Measure**
Sweet Potato			200,000 vines
Post control standards			
CROP UNDER CERTIFICATION	Purity (Physical)	Off type	Diseases*
Sweet potato	100	0	SPVD, sweet potato bacterial wilt

FIELD AND LABORATORY STANDARDS (FOR PRODUCTION OF CERTIFIED SEED CLASSES) – TEA (*CAMELLIA SINENSIS* (L.) O. KUNTZ)

Field Standards	
Cropping History (Seasons)	**Remarks**
An existing tea field of uniform certified cultivar(s) should be rested from normal plucking and allowed to grow freely to produce shoots for a period of 5 to 7 months depending on the prevailing climatic conditions prior to harvesting of the cuttings. The mother bushes should not run for more than 7 months to avoid uneven rooting and shoot development when cuttings are planted in the nursery. New fields should be rid of free of *Armillaria* root rot, root knot nematodes and should generally be suitable for tea cultivation.	The field should be free of pests, diseases, rogues, volunteer plants, weeds, should not have been hut or boma sites, and not prone to environmental stresses such as frost, hail damage path, and nutritional deficiency.

Isolation, metres (minimum)					
BR	**PB**	**B**	**C1**	**C2**	**Std**
5	5	2	2	2	2

Off types of other cultivars					
BR	**PB**	**B**	**C1**	**C2**	**Std**
0	0	0	0	0	0

	Crop pest/disease tolerance (Tolerance %**)**											
	Field						**Laboratory**					
Disease/pest	**BR**	**PB**	**B**	**C1**	**C2**	**Std**	**BR**	**PB**	**B**	**C1**	**C2**	**Std**
Blister blight *(Exobasidium vexans)*	0	0	0	0	0	0	0	0	0	0	0	0
Brown blight (*Colletotrichum camelliae*)	5	5	5	5	5	5	0	0	0	0	0	0
Grey blight (*Pestalotiopsis theae*).	5	5	5	5	5	5	0	0	0	0	0	0
Armillaria Root Rot	5	5	5	5	5	5	0	0	0	0	0	0
Hypoxylon Wood Rot	5	5	5	5	5	5	0	0	0	0	0	0

Phomopsis theae	5	5	5	5	5	5	0	0	0	0	0	0
Tea mites	5	5	5	5	5	5	0	0	0	0	0	0
Scale insects	5	5	5	5	5	5	0	0	0	0	0	0
Tea weevils	5	5	5	5	5	5	0	0	0	0	0	0
Citrus Aphid (*Toxoptera aurantii*)	0	0	0	0	0	0	0	0	0	0	0	0
Mosquito bug *(Helopeltis schoutedeni)*	5	5	5	5	5	5	0	0	0	0	0	0
Any emerging disease or pest of economic importance	0	0	0	0	0	0	0	0	0	0	0	0

Preparation Standards						
Parameter	**Tolerance (**number of cuttings with abnormality per 300 cuttings**)**					
Abnormality	**BR**	**PB**	**B**	**C1**	**C2**	**Std**
Mosquito bug *(Helopeltis schoutedeni)*	5	5	5	5	5	5
Yellow Tea Thrips *(Scirtothrips dorsalis)*	5	5	5	5	5	5
Scale insects	5	5	5	5	5	5
Tea weevils	5	5	5	5	5	5
	Tolerance (maximum number of units outside the class range e.g. number of cuttings per 300 cuttings**)**					
Preparation classes	**BR**	**PB**	**B**	**C1**	**C2**	**Std**

Class 1 (minimum-maximum size range within class) Single-node one leaf cuttings (stem length: 3 – 4 cm)	5	5	5	5	5	5
Class 2 (minimum-maximum size range within class) Single-node one leaf cuttings with short internodes (stem length: < 3 cm)	5	5	5	5	5	5
Parameter	**Maximum lot size (measure)**					
Lot sizes (maximum number of cuttings in one lot)	**BR**	**PB**	**B**	**C1**	**C2**	**Std**
	10,000	10,000	10,000	10,000	10,000	10,000
Post Control standards	**Physical purity (%)**		**Off types (no. of plants per 1000 plants**		**Pests and diseases (tolerance limit)**	
	100		0		0	

EIGHTH SCHEDULE r. ((17); (18);(22))
INSPECTION DEADLINES

CROP	PROCEDURE	TIMELINE	INSPECTION VISITS	Remarks
Potato	PCN & Bacterial Wilt testing	Before planting. Takes 14 days		Advisory
	1st inspection	At flowering/canopy cover for non-flowering varieties / tuber initiation stage or approx. 1-1.5 month after emergence to check growing conditions, off types, isolation & diseases	I	Mandatory
	2nd inspection	At tuber development stage.	II	Mandatory
	De- haulming.	Dehaulming date depends on seed size and aphid pressure. The inspector may advice the grower on the appropriate time to dehaulm after approval		
	Sampling for Bacterial wilt	Before harvesting. Minimum of 400 representative tubers	III	Mandatory
	Bacterial wilt & Black leg testing	14 days		
	Lot inspection	Done within 10 days after receipt of an application	IV	Mandatory
	Sampling for post control	During sampling for Bacterial Wilt		
	Label request	Done after all test done are negative and lot inspection result approved		
	Inspection & labelling of Apical cuttings & TC plants. Sampling for post control and Disease test	One inspection within one month after establishment One inspection within one month after establishment	I	Mandatory
	Sealing	Done after all results and requirement have been met	V	Mandatory
Sweet potato	Soil testing	Before planting. Takes 14 days		Advisory/optional
	Crop registration	Done one month after emergence		
	1st inspection	One inspection done in the early part of the growing season, (approximately 5 -6 weeks after establishment).	I	Mandatory
	2nd inspection,	At vine maturity stage to pick out off-types (2 months establishment). Sampling &	II	Mandatory

		Testing for SPVD and Weevils		
	3rd inspection	This inspection is conducted if the crop overstays in the field after approval to assess and approve mother block for subsequent generations.	IV	Mandatory
	Lot inspection labelling & Sealing	Done at harvest. Application submitted 7 days before harvest.	IV	Mandatory
Cassava	Soil testing	Before planting. Takes 14 days		Advisory
	Crop registration	Done one month after planting		
	1st inspection	One inspection done in the early part of the growing season, (3 – 5 months after establishment).	I	Mandatory
	2nd inspection	6 - 8 Months after establishment. CMD, CBSD and CBB inspection and picking out off types. Sampling for CMD, CBSD and CBB	II	Mandatory
	3rd inspection	10-12 months after establishment	III	Mandatory
	Lot inspection, Labeling & Sealing	Done at harvest application submitted 7 days before harvest. Sealing will be Done after all results and requirement have been met	IV	Mandatory
mother block (Coconut, Cashew nuts and Macadamia, Banana, Mango, Avocado)	First Inspection	Isolation distance shall be determined At establishment and confirmed at flowering/fruiting General sanitation Pests and diseases	annually	Mandatory
	Second Inspection	Done at fruiting in the first season to confirm trueness to type, Varietal purity	Once in the crop life cycle	Mandatory

Nursery inspection (Coconut, Cashew nuts and Macadamia, Banana, Mango, Avocado,)	First & final inspection	After grafting and before distribution General sanitation and orderliness (soil mixing and potting, seeding area, grafting area, hardening area and dispatch), pests & diseases of concern Traceability of scions, micro-propagules varietal purity, off types, identity, Pest and diseases Tagging of seedlings	Once per lifecycle of the seedling in the nursery	Mandatory
Tissue culture facility (Coconut, Cashew nuts and Macadamia, Banana, Mango, Avocado, Sugarcane, Oil palm)	First inspection	At establishment/ before start of distribution or sales Phytosanitary protocols (structure set up, records and documentation) Management and technical competence General sanitation Pest and disease management Traceability system varietal purity, off types, identity,	Bi-annually	Mandatory

Crop	**Location (Field/Lab)**	**Crop Stage**	**Number of inspection**	**Remarks**
Sugar Cane	Field	45- 60 days after shoot emergence	1	check isolation, volunteer crops, diseases, pests, general sanitation Smut (*Ustilago scitaminea*
		120-130 days after shoot emergence	II	check off-types, diseases, pests, general sanitation Grassy shoot (*Mycoplasma* like Smut (*Ustilago scitaminea*) Leaf scald (*Xanthomonas albilineans)* Top borer (*Scirpophaga excerptalis).*

		15 days before harvesting	III	check age of cane, off-types, diseases, pests, General sanitation Sugarcane wilt (*Cephalosporium sacchari)* Top borer (*Scirpophaga excerptalis)* Internode borers (*Chilosacchari phagusindicus)* Stalk borers (*Chilo auricilius)* White scale insects and mealy bug (*Melanaspis glomerata, Saccharicoccus sacchari)*
Pyrethrum	Field	Before onset of flowering	I	check for isolation, off-types, volunteer plants, diseases, pests, General sanitation
		Flowering	II	check for off-types, diseases, pests, General sanitation

NB:

1. For Sweet potato Standard seed is to be inspected once at vine maturity
2. For mother block plants, plant health inspections shall be done annually
3. Crop registration shall be done one month after emergence/ initiation for TC /establishment for mother stock

NINTH SCHEDULE **(r. (15)**

GUIDELINES FOR MAINTENANCE OF SOURCES OF VPS

Guideline for maintenance			
Type of seed source	Criteria	For VPS Certified Seed	For VPS Quality Declared Standard Seed
Seedlings and plantlets	Cleaning	Apply crop specific procedures for laboratory cleaning and regeneration of VPS	N/A
	Disease and pest scoring, indexing and testing	Carryout routine scouting, scoring for pests and diseases, perform indexing using crop specific protocols and maintain records	N/A
	Labelling and coding	Clearly and accurately label crops showing crop species, variety, data planted, expected maturity date, code specific blocks or plants for traceability	Clearly and accurately label crops showing crop species, variety, data planted, expected maturity date, code specific blocks or plants for traceability
	Registration and inspections	Make timely application to the service for registration and inspection of the crop and maintain records	Make timely application to the service for registration and inspection of the crop and maintain records
Annuals	Description and trueness to type	Develop and maintain variety descriptors and use them eradicate off types to maintain trueness to type	Access and use pictorial variety descriptors to eradicate off-types and maintain trueness to type
	Disease and pest scoring, indexing and testing	Carryout routine scouting, scoring for pests and diseases, perform indexing using crop specific protocols and maintain records	Carryout pest and disease routine scouting and maintain records
	Labelling and coding	Clearly and accurately label crops showing crop species, variety, data planted, expected maturity date, code specific blocks or plants for traceability	Clearly and accurately label crops showing crop species, variety, data planted, expected maturity date, code specific blocks or plants for traceability
	Registration and inspections	Make timely application to the service for registration and inspection of the crop and maintain records	Make timely application to the service for registration and inspection of the crop and maintain records
	In situ and in vitro maintenance	Prepare and maintain in vitro cultures of VPS varieties/ or submit for in vitro culture and maintenance by a gene	Maintain field conservation plots of VPS varieties, well maintained and labelled

		bank; prepare and maintain in situ maintenance of VPS varieties well labelled and maintained	
Trees	Tree description and trueness to type	Develop and maintain tree variety descriptors and use them eradicate off types to maintain trueness to type	Access and use pictorial tree variety descriptors to eradicate off-types and maintain trueness to type
	Tree labelling and coding	Clearly and accurately label tree showing species, variety, date planted, date of first fruiting, code specific blocks or plants for traceability	Clearly and accurately label tree showing species, variety, date planted, date of first fruiting, code specific blocks or plants for traceability
	Tree registration and inspection	Make timely application to the service for registration and inspection of the tree and maintain records	Make timely application to the service for registration and inspection of the tree and maintain records
	Tree pruning and nutrition and pest and disease management	Follow crop specific procedures for pruning, fertilizer rates and other crop care practices to maintain trees; follow crop specific management practices for key pests and diseases to ensure pest/disease free status is maintained	Follow crop specific procedures for pruning, fertilizer rates and other crop care practices to maintain trees; follow crop specific management practices for key pests and diseases to ensure pest/disease free status is maintained

NINTH SCHEDULE r. (8);(13))

REQUIREMENTS FOR REGISTRATION AS SOURCES OF VPS
(For Quality Declared Standard Seed)

i. Registration Merchant merchant/CBO/SHG certificate
ii. Approved production facilities for specific VPS
iii. Proof of VPS certification by the Service
iv. Quality assurance system
v. Documentation and traceability system
vi. Skilled personnel

TENTH SCHEDULE
MINIMUM VPS VARIETY LISTING REQUIREMENT r.(8)

Part A: Registration Requirements

1. A verified variety descriptor for production of quality declared seed. A descriptor is the morphological (physical) attributes of the variety.
2. Declaration of source, maintenance and license(s)

Part B: Information required on the List

1. Variety Name
2. Year of registration/release
3. Source
4. Maintainer/ Licensee
5. Recommended areas of production (Agro ecological zones)
6. Life cycle- Perennial/Annual/
7. Duration to maturity (months)
    a. Annuals (time to physiological maturity/harvest) ……..…….
    b. Perennials (time to the first harvest) ……
8. Yield in units/ha. ……
9. Special attributes (such as Vitamin, protein content, disease resistance)

ELEVENTH SCHEDULE (r.25)

Validity of Period of Certification

Category	Common name	Scientific name	Validity Period		Type of VPS (final product)	After field inspection (if in situ)	
			Room Temperature °C	*Cold Storage*			
Sugar Crop	Sugar cane	*Saccharum spp.*	1 month		sets	6 months	
Root and Tuber crops	Potato	*Solanum tuberosum L*	2 months	6 months	tubers	14 days	
	Sweet potato	*Ipomea batatas*	3 days		vines	2 months	
	Cassava	*Manihot esculenta*	14 days		cuttings	2 months	
Fruit trees	Citrus	*Citrus spp*	3 days		scions/ seedling	3 months	
	Avocado	*Persea Americana*	3 days		scions/ seedling	3 months	
	Mango	*Mangifera indica*	3 days		scions/ seedling	3 months	
	Bananas and plantains	*Musa spp.*			suckers	3 months	
	Apple	*Pyrus malus L*	3 days		scions/ seedling	3 months	
	Passion fruit	*Passiflora edulis*	1 day		scions/ seedling	1 month	
	Straw berries	*Fragaria vesca Fragaria chiloensis*	1 day		sucker	1 month	
	Pawpaw	*Carica papaya*			seedling	3 months	
	Pineapple	*Ananus comosus*	14 days		crowns	2 months	
Oil and nut crops	Cashew nut	*Anacardium occidentale*	1 day		scions/ seedling	3 months	
	Macadamia nuts	*Macadamia sp.*	1 day		scions	3 months	
	Oil-palm	*Elaeis quineensis*			seedling	3 months	
	Coconut	*Cocos nucifera*			seedling	3 months	
Medicinal and aromatic plants	Pyrethrum	*Tanacetum cinerariifolium*	1 day		splits	1 month	
Grasses	Napier grass	*Pennisetum purpureum K. Schum*	1 month		cuttings	3 months	
	Brachiaria	*Brachiaria nigropedata*	1 day		splits/ seedling	3 months	
Beverage crops	Tea	*Camelia sinensis*	1 day		cutting /seedling	3 months	
	Coffee	*Coffea robusta/ Coffea arabica*	1 day		scions/ seedling	3 months	