#### **GOVERNMENT OF ZAMBIA**

STATUTORY INSTRUMENT No. 23 of 2018

#### The Plant Variety and Seeds Act

(Laws, Volume XIV, Cap. 236)

#### The Plant Variety and Seeds Regulations, 2018

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Prescribed fees

IN EXERCISE of the powers contained in sections 35 and 84 of the Plant Variety and Seeds Act, the following Regulations are made:

- 1. These Regulations may be cited as the Plant Variety and Seeds Regulations, 2018.
- Title

Interpretation

- 2. In these Regulations unless the context otherwise requires:
  - "agricultural value" means the agronomic attribute of a variety;
  - "analytical purity" means the percentage by weight of pure seed determined by physical purity analysis;
  - "Association" means the International Seed Testing Association (ISTA);
  - "authentic sample" means a quantity of seed of a variety which exhibits defined habits and characteristics as originally submitted by the applicant;
  - "Certifying Agency" has the meaning assigned to the word in the Act:
  - "Certifying Authority" has its meaning assigned to the words in the Act;
  - "control growing" means the growing of plants to determine cultivar purity, disease infection and other factors;
  - "Controller of Seeds" means the Public officer appointed under the Act;
  - "cultivar" means subdivision of any species of seed which can be distinguished from another subdivision of that species by means of growth, plant, fruit or other characteristics;
  - "cultivar purity" means the percentage by number of seeds or plants found to be truetotype under laboratory, field or control growing examination;
  - "defect index" means a figure giving the disease, pest or other physical conditions of a growing crop, a control growing crop or a potato seed lot, taking into consideration the frequency and severity of the defects;
  - "defect test" means a test carried out to determine the percentage by weight of broken, insect damaged, diseased or shrivelled seeds;
  - "distinctness, uniformity and stability test" means a test for distinctness, uniformity and stability of variety;
  - "eligible variety" means an officially released variety;

- "field inspection" means an inspection for a seed field standards as part of a seed certification programme;
- "germination capacity" means the percentage by number of pure seed which in the course of a germination test have produced normal seedlings;
- "genetic purity" means the percentage by number of a seed or plant found to be true to genotype under laboratory, field or control growing examination;
- "hybrid means a plant which grows from a seed produced as a result of controlled crossing between two or more genetically unlike parents;
- "inbred line" means a pure line developed by self pollination and selection until homozygous plants are obtained;
- "Institute" means the Seed Control and Certification Institute of Zambia:
- "isolation" means the required distance in space or time between two crops of the same species or between two crops of very closely related species to prevent contamination either mechanically or by pollination;
- "icensed seed inspector" means a person licensed by the Controller of Seeds to inspect seed;
- "licensed seed sampler" means any person licensed by the Controller of Seeds to sample seed;
- "licensed seed testing laboratory" means a premises licensed by the Controller of Seeds to test seed;
- "list of specified varieties" means an official list of varieties that have been approved by the Variety Release Committee for certification purposes;
- "modified inbred line" means an improved inbred line with at least one superior trait incorporated while maintaining its original phenotypic characteristics;
- "noxious weed" means weed species declared Cap. 231noxious by the Noxious Weeds Act;
- "official seed analyst" means a government seed analyst;
- "official seed inspector" means a government seed inspector;
- "official seed sampler" means a government seed sampler;
- "official seed testing laboratory" means a government seed testing station;
- And Another Another Another Another Another Release Committee and may be multiplied for seed;

- "offtype plant" means a plant which does not exhibit the recognised and accepted habits and characteristics of the cultivar being grown;
- "open pollinated" means variety that is reproduced by means of un-controlled cross pollination in isolation;
- "parent seed" means general seed of any of the classes specified in the Third Schedule which may be used to produce seed under these regulations;
- "prerelease" means the official authorisation for the official testing of a new variety;
- "prescribed seeds" means the prescribed seed specified in the Second Schedule;
- "purity" means the percentage by weight of pure seed as determined by physical purity analysis;
- "quality declared seed" means a class of seed produced within the framework of the seed certification scheme by a registered seed grower under Regulation 8;
- "QDS" means quality declared seed;
- "release" means the official authorisation for the multiplication of a new variety;
- "seed means any plant, plant material or plant part which is used for plant propagation;
- "seeds" means prescribed seeds specified in the First Schedule;
- "seed certification" means a system for quality control of seed;
- "seed grower" means any person or organisation registered by the Controller of Seeds to produce seed for sale under Regulation 9 and seed producer shall be construed accordingly:
- Aseed importer" means any person or organisation importing seed into Zambia for re sale or planting;
- "seed lot" means a specified quantity of seed, which is homogenous and physically identifiable;
- "seed processing" means the activity carried out to improve the condition of the seed, which may include cleaning, grading, treating;
- "seed sampler" means a person authorised by the Controller of Seeds to sample seeds under Regulation 14;
- "seed seller" means any person or organisation selling seeds under Regulation 18;

- "seed testing station" means premises referred to under Regulation 22;
- "self pollinated variety" means a variety that is reproduced by means of self pollination;
- "stability" means occurrence of essential characteristics in a variety after repeated reproduction;
- "stake" means a stem cutting;
- "tuber control" means the examination of potato tubers for the defects specified out in Part 2 of the Fourth Schedule;
- "uniformity" means the resemblance, within tolerance, in major characteristics of individual plants within a variety;
- "value for cultivation and use" means agricultural and produce value of a variety;
- Avariety" means a subdivision of a crop of seed which can be distinguished from other subdivisions of that crop by means of plant, fruit or other characteristics;
- "varietal purity" means the percentage by number of seed or plants found to be true to type;
- "vegetatively propagated variety" means a variety that is reproduced using the vegetative parts of the plant;
- "village" means rural community or place where seed services are not easily available or accessible;
- "vine" means a sweet potato stem cutting;
- "volunteer plant@ means a growing plant of the
- same species as that being grown for seed which has not been specifically planted in the place where it is growing; and
- "weed plant" is a plant which is not of the same species as the crop being grown, and which is generally considered as a weed

Certifying Authority

- 3. (1) The Institute shall conduct variety assessment, seed testing and seed inspections.
- (2) The Institute shall monitor personnel and institutions licensed under this Act.
- (3) The Institute shall monitor seed trade and register seed companies operating within the Republic.

Licensing of Certifying Agency 4. (1) An institution that intends to be licensed as a Certifying Agency shall apply to the Controller of Seeds in Form 1 set out in the First Schedule.

- (2) The Controller of Seeds shall, where the Controller of Seeds approves an application, issue a licence in Form II set out in the First Schedule.
- (3) The Controller of Seed shall, where the Controller of Seed rejects an application for a licence, inform the applicant of the rejection in Form III as set out in the First Schedule.
- 5. The seeds set out in the Second Schedule shall be prescribed seed for the purposes of the Act.

Prescribed seeds

6. (1) A person shall not deal in the seed set out in the Third Schedule unless that seed has been certified by the Certifying Authority or a Certifying Agency.

Certification of seed

- (2) A seed shall not be certified unless it has been produced, inspected, sampled, tested and complies with the standards set out in the Fifth Schedule.
- (3) A seed shall be certified in seven classes as specified in Fourth Schedule.
- (4) The Variety Release Committee shall approve a cultivar for certification.
- (5) A cultivar is not eligible for certification if it has not been approved by the Variety Release Committee.
- (6) A seed which contains a noxious weed or noxious ergot is not eligible for certification.
- 7. (1) A person shall not offer seed for sale unless the seed has been certified under Regulation 6.

Sale of Seed

- (2) The species of seed set out in the Third Schedule shall not be offered for sale unless it has been certified.
- 8. A seed whose quality conforms to the standards set out in the Fifth Schedule shall be a declared seed.

Declaration of seed quality

- 9. (1) A person who intends to grow seed shall apply for registration as a seed grower in Form IV as set out in the First Schedule on payment of the fee set out in the Seventh Schedule.
- Registration as seed grower
- (2) An application shall not be approved in respect of land on which during the preceding season other cultivars of the same crop or other closely related crops have been grown, and in the case of potato where during the preceding three years potatoes or other Solanaceous crops have been grown.
- (3) The Controller of Seeds shall, on registration of a person as a registered seed grower, furnish the applicant with a certificate of registration in Form V set out in the First Schedule.

- (4) Unless the Controller of Seeds decides otherwise, only one cultivar of the same species shall be permitted on the same farm.
- (5) The registered seed crop shall not exceed the approved hectarage by more than ten percent.
- (6) Where a registered seed crop exceeds the approved hectarage under subregulation (5), the excess amount shall be destroyed without compensation, immediately on the order of an authorised seed inspector.
- (7) The Controller of Seeds shall keep a register of registered seed growers.
- (8) A seed grower shall plant the appropriate parent seed for the production of that grower's registered seed class and shall keep a record of that parentage including certification labels that may be sufficient to satisfy the requirements specified in Form V set out in the First Schedule.
- (9) A person who intends to be a seed grower shall register a seed crop not later than 15<sup>th</sup> October in every year for rain-fed crops and not later than 31<sup>st</sup> March in every year for irrigated crops.
- (10) In case of cotton, seed production shall be registered in zones as designated by the Certifying Authority.

Late registration

- 10. (1) A fee for late registration specified in the Seventh Schedule shall be imposed for seed crops registered after the deadline set under regulation 9(9).
- (2) An application received after two weeks of the deadline stated under subregulation (1) shall not be accepted.

Evidence of class of seed grown

- 11. (1) A grower shall plant the class of seed appropriate for the grower's production and shall retain such evidence of that class as may be sufficient to satisfy the requirements specified in Form V set out in the First Schedule.
- (2) A seed produced under Class AQuality declared seed@ shall be produced from a quality declared seed or higher class as specified in the Fourth Schedule.
- (3) The Controller of Seeds may from time to time approve planting material not of a class prescribed in the Third Schedule to be used as parent seed for production of seed under these Regulations.

Field inspections

12. (1) A seed inspector shall conduct field inspection for the purpose of certification.

- (2) A seed inspector conducting a field inspection shall refuse to certify a crop if that inspector is satisfied that—
  - (a) the crop is heavily contaminated with weeds, other species, disease or insects, so as to render the crop unfit for seed or make inspections impracticable;
  - (b) in the case of blights in potatoes, the infection is approximately fifty percent except that the inspector may certify the crop for seed if the crop is ready for harvest, and the haulms are destroyed within seventytwo hours of the inspection;
  - (c) the isolation distance or the standards relating to offtypes or other cultivars, set out in the Fifth Schedule have not been complied with;
  - (d) for hybrids of maize, sorghum and sunflower there are more than three pollinating females per thousand plants, and in the case of potato, the defect index exceeds the value prescribed in the Fifth Schedule for class B; or
  - (e) the crop exceeds the approved and registered hectarage by more than ten percent.
  - (3) If a seed crop does not meet the standards

for the class it has been grown for non-hybrids, it may be approved in a lower class or rejected for certification if found to be of lower standard than that specified for 4th generation certified seed.

- (4) A seed inspector shall for the purpose of certification, conduct the following minimum number of inspections:
- (a) for open pollinated, a minimum of three inspections, one of which shall be clearance for harvesting; and
- (b) for hybrids, a minimum of five inspections, three of which shall be during flowering.
- (5) A seed inspector shall make a report of every field inspection in Form VI for general seeds and Form VII for potato seed, set out in the First Schedule, which shall be counter signed by the registered grower or that grower's representative.
- 13. (1) A person intending to inspect seed shall apply to the Controller of Seeds for a licence to inspect seed in Form VIII set out in the First Schedule on payment of the applicable fee set out in the Seventh Schedule.

Licence for seed inspectors

(2) A person shall not inspect seed without a licence to inspect seed in Form IX set out in the First Schedule.

- (3) The Controller of Seeds shall issue a license to inspect seed where the Controller of Seeds is satisfied that the applicant has undergone appropriate training and qualifies to be a seed inspector.
  - (4) A licence to inspect seed shall—
    - (a) specify the conditions relating to the inspection of seed; and
    - (b) be valid for a period of twelve months.
- (5) A licensed seed inspector shall be subject to supervision by the Certifying Authority and shall at all times maintain a level of performance satisfactory to the Controller of Seeds.
- (6) The Controller of Seeds shall maintain a register of holders of licences to inspect seed.
- (7) The minimum qualification for a seed inspector shall be the same as that for a government seed inspector.

Licence for seed sampler

- 14. (1) A person shall not sample seed without a licence to sample seed in Form XI set out in the First Schedule.
- (2) A person intending to sample seed shall apply to the Controller of Seeds for a licence to sample seed in Form X set out in the First Schedule upon payment of the applicable fee set out in the Seventh Schedule.
- (3) The Controller of Seeds shall issue a licence to sample seed where the Controller of Seeds is satisfied that the applicant has undergone appropriate training to sample seed and qualifies to be a seed sampler.
  - (4) A licence to sample seed shall—
    - (a) specify the conditions relating to the sampling of seeds;
    - (b) be valid for a period of twelve months.
- (5) A licensed seed sampler shall be subject to supervision by the Certifying Authority and shall at all times maintain a level of performance satisfactory to the Controller of Seeds.
- (6) The Controller of Seeds shall maintain a register of holders of licences to sample seed.
- (7) The minimum qualification for seed sampler shall be the same as that for a Government seed sampler.

Licence for seed analyst

15. (1) A person shall not analyse seed without a licence to analyse seed in Form XIII set out in

the First Schedule.

- (2) A person intending to apply for a licence to analyse seed shall apply to the Controller of Seeds in Form XII set out in the First Schedule upon payment of the applicable fee set out in the Seventh Schedule.
- (3) The Controller of Seed shall issue a licence to analyse seed where the Controller of Seeds is satisfied that the applicant has undergone appropriate training to analyse seed and qualifies to be a seed analyst.
  - (4) A licence to analyse seed shall—
    - (a) set out the conditions relating to analysis of seed; and
    - (b) be valid for a period of twelve months.
- (5) A licensed seed analyst shall be subject to supervision by the Certifying Authority and shall at all times maintain a level of performance satisfactory to the

Controller of Seeds.

- (6) The Controller of Seeds shall maintain a register of holders of licences to analyse seed.
- (7) The minimum qualifications for seed analysts shall be as that for Government seed analyst.
- 16. (1) A person or organisation shall not test seeds without a licence to test seed in Form XV set out in the First Schedule.

Licence for seed testing

- (2) A person intending to apply for a licence to test seed where shall apply to the Controller of Seeds in Form XIV set out in the First Schedule upon payment of the applicable fee set out in the Seventh Schedule.
- (3) The Controller of Seed shall issue a licence to test seed the Controller of Seeds is satisfied that the applicant has the ability and appropriate facilities to test seed.
- (4) A licence to test seed shall be valid for a period of twelve months.
- (5) A licensed seed testing laboratory shall be subject to supervision by the Certifying Authority and shall at all times maintain a level of performance satisfactory to the Controller of Seeds.
- (6) The Controller of Seeds shall maintain a register of holders of licences to test seed.
- (7) The Controller of Seeds or the Controller of Seed's representative shall inspect licensed seed testing laboratories and other related facilities.
- 17. (1) A person shall not process seeds without a licence to process seed as set out in Form XVII in the First Schedule.

License for seed processing

- (2) A person intending to apply for a licence to process seed shall apply in Form XVI set out in the First Schedule upon payment of the applicable fee in the Seventh Schedule.
- (3) The Controller of Seeds shall issue a licence to process seed where the Controller of Seeds is satisfied that the applicant has undergone the appropriate training and has the appropriate processing facilities to produce quality seed.
  - (4) A licence to process seed shall
    - (a) set out the conditions relating to the processing of seed; and
    - (b) be valid for a period of twelve months.
- (5) A licensed seed processing plant shall be subject to supervision by the Certifying Authority and shall at all times maintain a level of performance satisfactory to the Controller of Seeds.
- (6) The Controller of Seeds shall maintain a register of holders of licences to process seed.
- (7) The Controller of Seeds or the Controller's representative shall inspect any processing premises.

Licence for seed sellers

- 18. (1) A person shall not sell seeds without a seed seller=s licence in Form XIX set out in the First Schedule.
- (2) A person intending to apply for a seed seller's licence shall apply in Form XVIII set out in the First Schedule upon payment of the applicable fee set out in the Seventh Schedule.
- (3) The Controller of Seeds shall issue a seed seller's licence where the Controller of Seeds is satisfied that the applicant has the ability, knowledge and appropriate facilities to maintain the quality of seed.
  - (4) A seed seller's licence shall—
    - (a) set out the conditions relating to the maintenance of the seed to be exposed for sale; and
    - (b) be valid for a period of twelve months.
- (5) A licensed seed seller shall be subject to supervision by the Certifying Authority and shall at all times maintain a level of performance satisfactory to the Controller of Seeds.
- (6) The Controller of Seeds shall maintain a register of holders of seed seller's licence.
- (7) The Controller of Seeds or the Controller of Seeds representative shall enter and inspect any premises where seeds are kept for sale.

- (8) A report of every seed warehouse inspection shall be made by the seed inspector in Form XX set out in the First Schedule, and shall be countersigned by the owner or the owner's representative.
- 19. A licence issued under these Regulations may be suspended or revoked by the Certifying Authority for a breach of the conditions set out in a particular licence.

Suspension or revocation of licence

20. (1) The holder of a suspended licence may apply to the Controller of Seeds for reinstatement of the licence.

Reinstatement of licences and reapplication for licences

- (2) A person may re-apply for a new licence where the existing license has been revoked under Regulation 19 in accordance with these Regulations.
- (3) The Controller of Seeds may reverse the suspension of the licence or grant a new license where the Controller of Seeds is satisfied that the applicant will uphold the conditions of the licence.
- 21. (1) The sampling of seed lots shall be conducted in accordance with the Association rules in force at the time of the sampling.

Sampling of seed Act No. 6 of 2017

- (2) A person may blend and bulk crops from different fields of the same origin, species and cultivar which have passed field inspections to constitute one seed lot under supervision of an official seed inspector.
- (3) The seed shall be weighed using weights approved under the Metrology Act.
- (4) A seed sampler who conducts the sampling shall submit that sample to the Controller of Seeds together with a report of the sampling in Form XXI set out in the First Schedule and countersigned by the applicant or the applicants representative.
- (5) A seed sample shall be collected at sealing and submitted to the Certifying Authority for laboratory tests for post control purposes.
- (6) A seed lot which has been sampled in accordance with this Regulation may be moved from one place to another.
- 22. The testing of seed for the purposes of determining seed quality shall be done, either by an official seed testing station or at a licensed seed testing station.

Testing of seeds

- 23. The official seed testing station shall—
  - (a) be the main government seed testing laboratory;
  - (b) monitor licensed seed testing laboratories in the country;
  - (c) test seed in accordance with Association rules;
  - (d) record the result of a laboratory seed test in Form XXII set out in the First Schedule and state whether the seed is marketable or not;

Official seed testing station

- (e) test seed samples drawn from licensed seed testing station for monitoring purposes; and
  - (f) issue seed certificates.

Licenced seed testing station

- 24. (1) A licensed seed testing station shall—
  - (a) be housed in premises approved by the Controller of Seeds and equipped in accordance with requirements specified;
  - (b) be managed by a licensed seed analyst;
  - (c) test seed in accordance with Association rules;
  - (d) record the results of the seed test in Form XXII set out in the First Schedule;
  - (e) make available to the Certifying Authority every sample tested for random sampling as specified in the Association rules;
  - (f) state in the certificate whether the seeds are marketable and the category of the seeds;
  - (g)make records available for inspection by the Controller of Seeds at reasonable times;
  - (h) be subject to supervision by Certifying Authority; and
  - (i) at all times maintain a level of performance satisfactory to the Controller of Seeds in the tests which it undertakes.
- (2) A change to approved premises shall not be made without prior approval of the Controller of Seeds to the accommodation or equipment of the station, except replacement of consumable stores.

Control growing

25. (1) A seed lot which has been sampled and tested under these Regulations shall be control grown in

accordance with instructions issued by the Certifying Authority in line with international requirements.

- (2) The Certifying Authority shall prepare a report on each control growing carried out under these Regulations in Form XXII for general seeds and Form XXIII for potato seeds set out in the First Schedule.
- (3) Despite section 25 (1) and (2), control growing for all crops specified in the Fourth Schedule is compulsory.
- (4) The Certifying Authority shall determine the percentage of seed-lots to be control grown for each crop and class.

Virus post control 26. (1) A grower shall in respect of a potato crop intended for production of prebasic (S) or basic seed (SE), give notice to the inspector with information on the time that grower intends to destroy the haulms and lift potatoes in order to ensure that samples

may be taken for purposes of virus control growing before the potatoes are lifted.

- (2) An inspector shall take a minimum of 500 tubers per field as samples for virus control growing in potatoes in the field after haulm destruction.
- (3) The Certifying Authority shall determine possible virus in potatoes using serological methods or ocular inspection or both, and shall give the result as a percentage by the number of infected tubers.
- (4) The Certifying Authority shall prepare a report on each virus pest control carried out under these Regulations in Form XXIV set out in the First Schedule.
- 27. (1) A seed grower shall present potato seed for tuber control—

Tuber control

- (a) not earlier than fourteen days and not later than nine months after it has been lifted; and
- (b) in seed lots, not exceeding fifteen tonnes each.
- (2) The Certifying Authority shall draw, from each lot presented for tuber control, at least ten primary samples of a minimum of fifty tubers each.
- (3) The primary samples mixed together shall form the working sample to be examined.
- (4) The Certifying Authority shall examine at least 500 tubers per seed lot.
- (5) The Certifying Authority shall wash the working samples, and cut through all the tubers before they are examined.
- (6) The Certifying Authority shall submit a report on each tuber control carried out under these Regulations in Form XXV set out in the First Schedule.
- 28. Potato seeds shall be graded in four sizes in accordance with the following specifications:

Grading of potato seed

- (a) small, between 30 40 millimeters;
- (b) medium, between 41 50 millimeters;
- (c) large, between 51 60 millimeters; and
- (d) ungraded.
- 29. (1) A seed inspector shall cause certified seed lots to be securely packaged, closed and sealed in containers.

Packaging of seed

(2) Where certified seed lots have to be repacked, the repacking shall be done only with the approval of and supervision by the Certifying Authority.

Labelling of seed

- 30. (1) A seller of seed whose quality has been declared under these Regulations shall label each package of seed being offered for sale and that label shall state the species, cultivar, purity, percentage by weight, germination capacity percentage by number, seed class, certification number, lot number, date of test and warning test where the seed lot is treated.
  - (2) The label shall be of a colour set out in the Third Schedule.

Sealing of seed

31. An inspector or sampler of seed who seals or causes to be sealed a container shall submit a sealing report in Form XXI set out in the First Schedule.

Storing of seed

- 32. (1) A person shall store seed both before and after certification in a manner satisfactory to the Controller of Seeds -
  - (a) so as to avoid disease, infection and contamination;
  - (b) in buildings disinfected with a disinfectant approved by the Controller of Seeds; and
  - (c) in case of potatoes, in lots separate from ware potatoes and other potato seed lots.
- (2) Where a person stores potato seed in an open shed that person shall not, in addition to the provisions of subregulation (1), allow volunteer solanaceous or old sprouting potato tubers within fifty metres of that open shed.
- (3) Where an inspector determines that a potato seed has been stored contrary to the provisions of this Regulation that inspector may—
  - (a) refuse certification; or
- (b) in the case of potato seed which has been certified, cancel such certification.

Validity of certification and quality declaration

- 33. (1) The validity of certification or quality declaration shall—
  - (a) be nine months for cereals, pulses, oil crops, fibre crops and root crops;
  - (b) be twelve months from the date of completion of testing the seeds for herbage grasses and legumes, vegetables and stimulant crops;
  - (c) for potato seed, be two months from the date of tuber control before or after the expiry of a certificate;
  - (d) for cassava if the seed crop is still in the field, be every two months up to the age limit not exceeding 18 months from date of planting after first rationing, unless rationed; and

- (e) for sweet potato, if the seed crop is still in the field, not exceeding two months from the date of planting and two months from the date of the previous harvest for a rationed crop.
- (2) The cassava and sweet potato planting material can not be re-validated, once harvested.
  - 34. (1) A person shall not import seed for sale—

Importation of seed

- (a) without a valid seed seller's license;
- (b) unless a seed import permit has been submitted to the Certifying Authority in Form XXVI set out in the First Schedule; and
- (c) if the seed does not comply with the minimum standards set out in the Fifth Schedule.
- (2) A seed import permit shall refer to one seed lot of a given species and cultivar.
- (3) The importer of seed shall notify the Certifying Authority about the arrival of the consignment to facilitate sampling for the purpose of checking its quality and trueness to type.
  - (4) Trueness to type shall be compulsory to all crops.
  - (5) The Controller of Seeds may—
    - (a) regulate the certification of imported seed lots; or
    - (b) restrict the importation of a species and cultivar of seed.
  - 35. (1) A plant variety shall be released in Zambia if—

Release of plant variety

- (a) it has been tested under a two stage procedure and found suitable for commercialisation in Zambia; or
- (b) it is considered so released as a result of an agreement on variety release to which Zambia is party.
- (2) The two stage procedure under subregulation (1) shall be—
  - (a) in the first stage, which is referred to as prerelease, the applicant applies to Variety Release Committee to have a new variety officially tested; and
  - (b) in the second stage, where the applicant applies for the full release of that new variety after official testing.
- 36. (1) The Minister shall, on the advice of the Controller of Seeds, appoint members to the Variety Release Committee.

Variety Release Committee

- (2) A member shall be appointed from individuals who have distinguished themselves as professionals in the field of agriculture or related fields
- (3) The composition of the Variety Release Committee is as set out in the Sixth Schedule.

Functions of Variety Release Committee

- 37. The functions of the Variety Release Committee are to
  - (a) review and set release procedures;
  - (b) release varieties for multiplication and marketing;
  - (c) recommend varieties for inclusion in the Variety Register;
  - (d) withdraw obsolete varieties from the list of recommended varieties; and
  - (e) approve the denominations of varieties.

Term of Office 38. The term of office of member of the Variety Release Committee shall be two years for the chairperson and three years for other members, and maybe eligible for re appointment for the same period.

Variety Release Committee meetings

- 39. (1) A Variety Release Committee shall at least four weeks before the expected date of the meeting issue a notice in writing to convene a meeting.
- (2) Two-thirds of the Variety Release Committee=s voting members shall constitute a quorum for the purpose of transacting the Committee's business.
- (3) The members of the Variety Release Committee shall, for the purpose of deciding whether a variety shall be released or not, carry out a secret ballot.
- (4) A decision of the Committee shall be passed by a simple majority of the votes counted.
- (5) In case of equal votes, the Chairperson shall have a casting vote.
- (6) The Secretary of the Variety Release Committee shall not be eligible to vote.

Functions of Secretariat of Variety Release Committee

- 40. The functions of the Secretariat of the Variety Release Committee are to
  - (a) give notice of meetings;
  - (b) take and circulate minutes of the meetings;
  - (c) receive and process applications for variety prerelease and release; and
  - (d) publish Lists of Recommended Varieties and Variety Registers.

Application for Variety pre-release

- 41. (1) A person that intends to apply for a variety pre-release shall apply to the Secretary of the Variety Release Committee in Form XXVII set out in the First Schedule.
- (2) The application shall be accompanied by an application fee as set out in the Seventh Schedule to cover the costs of multisite

testing or evaluation tests and all relevant documentation including the application for the Distinctness, Uniformity and Stability test by duly completed Form XXVII.

- (3) The applicant shall be limited to import set out quantities of prereleased varieties listed in the Sixth Schedule to test the market.
- 42. (1) Multisite data, which shall include agronomic information and a detailed botanical description of important morphological characteristics of a variety, shall be made available by the applicant.

Requirements for prerelease

- (2) The applicant shall deposit an authentic sample of the variety, whose amount shall be as determined by the Institute, with the Institute, which shall form the living description of the variety.
- (3) The parent lines of a variety for which certification is compulsory shall be made available to the Institute for the purpose of Distinctness, Uniformity and Stability testing and familiarisation by the Certifying Authority.
- (4) In case of hybrids, testing shall include seed production technology.
- 43. (1) In order to obtain enough information for release, official variety testing shall be done for a minimum of two growing seasons.

Duration for official variety testing

- (2) For released varieties, the Variety Release Committee may grant an exemption from the required minimum number of years of testing.
- 44. (1) A person intending to apply for a Variety Release shall apply to the Secretary to the Variety Release Committee in Form XXVIII set out in the First Schedule.

Application for variety release

- (2) The application shall be accompanied by—
  - (a) an application fee as set out in the Seventh Schedule;
  - (b) data for cultivation and use; and
  - (c) distinctness, Uniformity and Stability test results in duly completed Forms XXVII and XXV set out in the First Schedule.
- 45. (1) A variety shall present certain advantages in terms of agricultural or produce value over released varieties.

Requirements for release

- (2) A variety which has not met any of the above requirements shall not be considered for release unless it has also met the Distinctness, Uniformity and Stability test requirements.
- (3) A listed variety on an approved international variety catalogue to which Zambia is part of, shall be deemed released.

Rules for denomination of varieties

- 46. (1) An applicant is free to propose the denomination of a variety.
- (2) Varieties shall carry denominations which are simple, short, easily pronounced and not likely to be misspelt.
- (3) Numerals shall not be used as far as possible in the denomination of a variety except where this is an established practice for designating varieties.
- (4) A denomination shall not carry a meaning that exaggerates the merits of a variety.
- (5) After a variety has been phased out, its denomination shall not be used for another variety until after ten years.

List of varieties

- 47. (1) There are two types of lists of varieties namely Recommended Varieties and a Variety Register.
- (2) The Variety Register is a list of all the varieties released in Zambia.
- (3) The List of Recommended Varieties is an updated list of varieties under active certification.
- (4) The Institute shall maintain the Variety Register and the List of Recommended Varieties.

Fees

48. The fees prescribed in the Seventh Schedule are payable in respect of the matters set out therein.

Appeals

49. A person aggrieved by a decision of the Controller of Seeds made under these Regulations may appeal to the Minister.

Revocation of S.I No. 133 of 1984 and S.I No. 67 of 1988

50. The Plant Variety (Potato Seeds) Regulations of 1984 and The Plant Variety and Seeds Regulations of 1988 are revoked.

To:

The Director

Designation: .....

#### FIRST SCHEDULE

(Regulation

4(1), 4920, 4(3), 9(1), 9(3)(8),12(5), 13(1), 13(2), 14(2), 15(1), 15(2), 16(1), 16(2), 17(1), 17(2), 18(1), 18(2), 21,, 23, 24, 25, 26, 27, 31, 34, 41, 44)



 $Form I \\ (Regulation 4(1)) \\ (To be completed in triplicate)$ 

REPUBLIC OF ZAMBIA

The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

The Plant Variety and Seeds Regulations, 2018

#### APPLICATION FOR LICENSING OF CERTIFYING AGENCY

|                             | Seed Control and Cert<br>P.O. Box 350199, Chi<br>Zambia                                     |          |                        |                      |                   |                             |  |  |
|-----------------------------|---|----------|------------------------|----------------------|-------------------|-----------------------------|--|--|
| INSTITUTION APPLICANTS NAME |   |          |                        | ADDRESS              |                   |                             |  |  |
|                             |   |          |                        |                      |                   |                             |  |  |
|                             |   |          |                        |                      |                   |                             |  |  |
| En                          | nployer's name and address:   |          |                        |                      |                   |                             |  |  |
|                             |   |          |                        |                      |                   |                             |  |  |
| Qυ                          | alification   |          |                        | T                    |                   |                             |  |  |
| De                          | grees   | Diplo    | mas                    | Certificates         |                   | Etc.,                       |  |  |
|                             |   |          |                        |                      |                   |                             |  |  |
| En                          | nployment record:   |          | T                      |                      | ı                 |                             |  |  |
| En                          | nployer   |          | Post                   |                      | Period of Service |                             |  |  |
|                             |   |          |                        |                      |                   |                             |  |  |
| Ad<br>1.<br>2.<br>3.<br>4.  | Idress: Name of Institution: Postal Address: District: Physical Location. Telephone Number: |          | Province:              |                      |                   |                             |  |  |
| ٦.                          | Institutional Mobile N  |          |                        |                      |                   |                             |  |  |
|                             | E-mail address:   |          |                        |                      |                   |                             |  |  |
| Sig                         | gned:   |          | .Date:                 |                      |                   |                             |  |  |
| I, ins                      | ECLARATION  titution, do hereby certify that y of the above information be                  | t the ab | ove information is tru | e, correct and compl | ete. I also her   | reby understand that should |  |  |
| Sig                         | gned  |          | Date:                  |                      |                   |                             |  |  |

Please return the duly completed form including proof of payment of fees to:

The Director

The Director Seed Control and Certification Institute P.O. Box 350199, Chilanga, 13201 Zambia

| FOR OFFICE USE ONLY Comments by Director |   |    |  |  |  |  |  |
|--|---|----|--|--|--|--|--|
|  |   |    |  |  |  |  |  |
|  |   |    |  |  |  |  |  |
|  |   |    |  |  |  |  |  |
| Date this                                | day of                                  | 20 |  |  |  |  |  |
| Signed:                                  |   |    |  |  |  |  |  |
| Licence No.:                             |   |    |  |  |  |  |  |
|  | Controller of Seeds                     |    |  |  |  |  |  |
| Se                                       | eed Control and Certification Institute |    |  |  |  |  |  |

 $Form \ II \\ (Regulation \ 4 \ (2)) \\ (To be completed in triplicate)$ 



#### REPUBLIC OF ZAMBIA

## The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

## The Plant Variety and Seeds Regulations, 2018

#### NOTICE OF GRANT OF CERTIFYING AGENCY LICENCE

| To (Name and address of Institution)              |                     |
|---|---------------------|
|   |                     |
|   |                     |
|   |                     |
|   |                     |
| A Certifying Agency Licence is hereby granted for | the period –        |
| From  | to                  |
| Dated thisday of                                  | 20                  |
| Signed:   |                     |
|   |                     |
| Date  | Controller of Seeds |

#### Conditions

Seed analysis shall be conducted in accordance with Regulation 15.

Form III (Regulation 4 (3)) (To be completed in triplicate)



#### REPUBLIC OF ZAMBIA

The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

The Plant Variety and Seeds Regulations, 2018

#### NOTICE OF REJECTION OF APPLICATION FOR CERTIFYING AGENCY LICENCE

| 0   |
|---|
| N THE MATTER OF   |
| ou are notified that your application for certifying Agency Licence has been rejected on the following on the rounds: |
|   |
|   |
|   |
| Date this   |
| 20  |
| igned:  |
| Controller of Sands   |

Seed Control and Certification Institute

Form IV  $(Regulation\,9)$ (To be completed in triplicate)



#### REPUBLIC OF ZAMBIA

### The Plant Variety and Seeds Act

(Laws, Volume 14, Cap. 236)

# The Plant Variety and Seeds Regulations, 2018

#### APPLICATION FOR REGISTRATION AS SEED GROWER

| To:                   | The Director, Seed Control and Certification Institute P.O. Box 350199, CHILANGA, 13201.                |
|-----------------------|---|
| Name and              | t's name and address: d address of farm: o be grown: Cultivar:  |
|                       | ed: Class: Certification No: Quantity (kg):   |
|                       | rids: arent: Cultivar:Class: Certification No: Quantity (kg): Cultivar: Certification No:Quantity (kg): |
|                       | hectarage:  |
|                       | Species and cultivar Season (year)  |
|                       | ts:   |
| (A map g              | riving clear instructions on how to reach the farm must be drawn overleaf)                              |
|                       | FOR OFFICIAL USE ONLY   |
| Approved<br>Not appro | on received: Fee paid: for hectares  d for the period to pved for reasons  RATION No.                   |
| Date                  |   |

Form V (Regulation 9) (To be completed in triplicate)



#### REPUBLIC OF ZAMBIA

# The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

# The Plant Variety and Seeds Regulations, 2017

#### CERTIFICATION OF REGISTRATION AS SEED GROWER

|   | REGISTRATION NO:    |
|---|---------------------|
| Name and address of seed grower:                |                     |
| You are hereby registered as a seed grower to § | grow:               |
| Species:  |                     |
| Cultivar:                                       |                     |
| Intended seed class:                            |                     |
| From parent seed stock of:                      |                     |
| Seed class:Source                               | Certification No:   |
| For hybrids:                                    |                     |
| Female parent: Cultivar: Class:                 | Certification No:   |
| Male parent: Cultivar: Class:                   | Certification No:   |
| This registration is valid for the period:      | to                  |
| The conditions overleaf are imposed on this cro | ор.                 |
| <br>Date  | Controller of Seeds |



Form VI  $(Regulation\ 12)$ (To be completed in triplicate)

#### REPUBLIC OF ZAMBIA

### The Plant Variety and Seeds Act

(Laws, Volume 14, Cap. 236)

### The Plant Variety and Seeds

Regulations, 2017

#### FIELD INSPECTION – GENERAL SEEDS Report No....

Form VII (Regulation 12)

|                     | ing Organisation       |   |  |               |           |      |         |        |     |        |        |            |           |
|---------------------|------------------------|---|--|---------------|-----------|------|---------|--------|-----|--------|--------|------------|-----------|
| Grower Name:        |                        | Grower Number   |  |               | er        |      |         |        |     |        |        |            |           |
| Farm Phy            | ysical Address         | Field name  |  |               |           |      |         |        |     |        |        |            |           |
| Species             |                        |   |  |               |           | Va   | riety   |        |     |        |        |            |           |
| Seed Cla            | ISS                    |   |  |               |           | He   | ctarage |        |     |        |        |            |           |
| Crop Rot            | tation (crops)         | 1 seas  | son ago  |               |           | 2 s  | seasons | ago    |     |        |        |            |           |
| Stage of            | seed crop (tick)       |   | Vegetative   |               | Flower    | ing  |         |        | M   | aturit | y      |            |           |
|                     |                        |   |  |               | •         |      | •       |        |     | Yes    | 3      | No         | N/A       |
| 1                   | Registration details   | Are there inaccuracies with the seed crop registration?  Have corrections been noted? |  |               |           |      |         |        |     |        |        |            |           |
| For hybi            | nide                   | паче  | corrections beer   | ii iioteu?    |           |      |         |        |     |        |        |            |           |
| ror nyo             | rius                   | Word  | there off-types i  | in the mele r | oront ro  |      |         |        |     |        |        |            | _         |
| 2                   | Male Parent            | If yes  | s, give details bel<br>ner there were le<br>tive silk.   | low if applic | able and  | incl |         |        | ts  |        |        |            |           |
| 3                   | Female parent          |   | there off types i  |               | parent r  | ows' | ?       |        |     |        |        |            |           |
| 4                   | Synchronisation        |   | there good synch   |               |           |      |         |        |     |        |        |            | _         |
| 4                   | Synchronisation        |   | field affected by  |               | ting poll | n fr | om adia | aant   |     |        |        |            |           |
| 5                   | Isolation              | fields  | ?  |               |           |      | om auja | cent   |     |        |        |            |           |
| 6                   | Pollinating females    | Are th  | If yes give details indicating area(s) affected.  Are there pollinating females?  If yes, provide details. |               |           |      |         |        |     |        |        |            |           |
| For non             | hybrids                |   |  |               |           |      |         |        |     |        |        |            |           |
| 7                   | Cultivar Purity        | Does  | this crop confor   | m to the star | ndards?   |      |         |        |     |        |        |            |           |
| 8                   | Isolation              |   | this crop confor   |               |           |      |         |        |     |        |        |            |           |
| No. of co           | ounts of 100 plants    |   | Female parent  |               |           |      | f-types |        |     | Off    | type l | Male shadi | ng pollen |
|                     |                        |   | #  | %             |           | #    |         | %      |     | #      |        | %          |           |
| Infestati<br>on of: | estati Name Severity   |   |  |               |           |      |         |        |     |        |        |            |           |
| Disease             |                        |   |  |               |           |      |         |        |     |        |        |            |           |
| Pest                |                        |   |  |               |           |      |         |        |     |        |        |            |           |
| Weeds               |                        |   |  |               |           |      |         |        |     |        |        |            |           |
| Remark              | s:                     |   |  |               |           |      |         |        |     |        |        |            |           |
|                     |                        |   |  |               |           |      |         |        |     |        |        |            |           |
| Inspector           |                        |   |  |               |           |      | Inspec  | ctor N | Jum | ber:   |        |            |           |
| Signature           |                        |   |  |               |           |      | Date:   |        |     |        |        |            |           |
| Growers             | Signature / Representa | tive:   |  |               |           |      |         |        |     |        |        |            |           |



(To be completed in triplicate)

#### REPUBLIC OF ZAMBIA

### The Plant Variety and Seeds Act

(Laws, Volume 14, Cap. 236)

#### The Plant Variety and Seeds

Regulations, 2018

#### FIELD INSPECTION - POTATO SEEDS

REPORT No: .....

| Name and address of seed grower: |                  |                         |         |  |  |  |  |
|----------------------------------|------------------|-------------------------|---------|--|--|--|--|
|                                  |                  |                         |         |  |  |  |  |
| Crop registration No:            | Cultivar:        | Intended seed class:    |         |  |  |  |  |
| Parent seed Certification No.:   | :                |                         |         |  |  |  |  |
| INSPECTION RESULT DEFECT:        |                  |                         |         |  |  |  |  |
| Kind                             | Number (of kind) | Percentage              | Index   |  |  |  |  |
|                                  |                  |                         |         |  |  |  |  |
|                                  |                  |                         |         |  |  |  |  |
|                                  |                  |                         |         |  |  |  |  |
|                                  |                  |                         |         |  |  |  |  |
|                                  |                  |                         |         |  |  |  |  |
|                                  |                  |                         |         |  |  |  |  |
| Date:                            |                  |                         |         |  |  |  |  |
| Signature of Gro                 |                  | Signature and Inspector | r's No. |  |  |  |  |

The Director,

To:



Form VIII
(Regulation 13(1))
(To be completed in triplicate)
(to include sampler and analyst)

#### REPUBLIC OF ZAMBIA

# **The Plant Variety and Seeds Act** (Laws, Volume 14, Cap. 236)

**The Plant Variety and Seeds** *Regulations, 2018* 

#### APPLICATION FOR SEED INSPECTOR'S LICENCE

| Seed Control and Certifica<br>P.O. Box 350199, CHILA                               |                  |                   |
|--|------------------|-------------------|
| Applicant's name and address:  |                  |                   |
| Employer's name and address:   |                  |                   |
| Qualification (certificates, diplomas,   |                  |                   |
| Employment record:   |                  |                   |
| Employer   | Post             | Period of service |
|  |                  |                   |
| <br>Date   |                  | e of applicant    |
|  | FOR OFFICIAL USE | ONLY              |
| Application received: Approved for the period Not approved for reasons LICENCE No. | to               |                   |
| <br>Date   |                  |                   |

Form IX (Regulation 13(2)) (To be completed in triplicate)



#### REPUBLIC OF ZAMBIA

## The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

#### The Plant Variety and Seeds Regulations, 2018

#### SEED INSPECTOR'S LICENCE

| T | ICEN | CE | NO | ٠ |  |
|---|------|----|----|---|--|
|   |      |    |    |   |  |

| <br>Date  | Controller of Seeds |
|---|---------------------|
| This Licence is issued subject to the conditions overleaf:    |                     |
| for the periodto  |                     |
| of (Employer's name and address):                             |                     |
| A Seed Inspector's Licence is hereby granted to (Name and add |                     |

#### CONDITIONS

- 1. Field inspections shall be conducted in accordance with *Regulation 12*
- The holder of this licence shall make available field inspection reports to INSTITUTE as and when directed by the Controller of Seeds.
- 3. The holder of this licence may also sample seed.
- 4. The licence is valid for twelve months.
- 5. The Controller of Seeds may revoke or suspend this licence without notice if he is satisfied that the holder of the licence has conducted himself in a manner inconsistent with these *Regulations*.
- 6. The holder of a licence shall be required to re-apply to licensing Authority in case of movement from one organisation to another within 21 days.



 $Form \ X \\ (\textit{Regulation}\ 14(2)) \\ (To be completed in triplicate)$ 

#### REPUBLIC OF ZAMBIA

## The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

The Plant Variety and Seeds Regulations, 2018

#### APPLICATION FOR SEED SAMPLER'S LICENCE

| Seed Control and Certification<br>P.O. Box 350199, CHILANGA |                      |                   |
|---|----------------------|-------------------|
| Applicant's name and address:                               |                      |                   |
| Employer's name and address:                                |                      |                   |
| Qualification (certificates, diplomas, degr                 | rees, etc):          |                   |
| Employment record:  |                      |                   |
| Employer  | Post                 | Period of service |
|   |                      |                   |
|   |                      |                   |
| Date  | Signature of a       |                   |
|   | FOR OFFICIAL USE ONL | <u>Y</u>          |
| Application received:                                       | Fee paid             |                   |
| Approved for the period                                     | to                   |                   |
| Not approved for reasons                                    |                      |                   |
| LICENCE No.   |                      |                   |
|   |                      |                   |
| Date  |                      | Controller        |

Form XI
(Regulation\_14 (2))
(To be completed in triplicate)



REPUBLIC OF ZAMBIA

The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

The Plant Variety and Seeds Regulations, 2018

#### SEED SAMPLER'S LICENCE

| LICENCE NO. |  |  |  |  |  |  |  |  |
|-------------|--|--|--|--|--|--|--|--|
|-------------|--|--|--|--|--|--|--|--|

| A Seed Sampler's Licence is hereby granted to (Name     | and address):       |
|---|---------------------|
|   |                     |
|   |                     |
| of (Employer's name and address):                       |                     |
|   |                     |
| For the periodt   | 0                   |
| Γhis Licence is issued subject to the conditions overle | af:                 |
|   |                     |
| Date  | Controller of Seeds |

#### CONDITIONS

- 1. Seed sampling shall be conducted in accordance with *Regulation* 21.
- 2. The holder of this licence shall not carry out seed sampling without a Seed Sampler's licence.
- The holder of this licence shall make available seed sampling reports to the Institute as and when directed by the Controller of Seeds.
- The licence is valid for twelve months.
- The Controller of Seeds may revoke or suspend this licence without notice if he is satisfied that the holder of the licence has conducted himself in a manner inconsistent with these Regulations.
- The holder of a licence shall be required to re-apply to licensing Authority in case of movement from one organisation to another within 21 days

Form XII (Regulation 15(2)) (To be completed in triplicate)



#### REPUBLIC OF ZAMBIA

## The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

#### The Plant Variety and Seeds Regulations, 2018

#### APPLICATION FOR SEED ANALYST'S LICENCE

| То:                            | The Director,<br>Seed Control and Certification In<br>P.O. Box 350199, CHILANGA, |                      |                    |  |
|--------------------------------|--|----------------------|--------------------|--|
| Applic                         | ant's name and address:  |                      |                    |  |
|                                | Employer's name and address:   |                      |                    |  |
| Qualifi                        | Qualification (certificates, diplomas, degrees, etc):                            |                      |                    |  |
| Emplo                          | yment record:  |                      |                    |  |
| Emplo                          | yer  | Post                 | Period of service  |  |
|                                |  |                      |                    |  |
|                                | Date Signature of applicant  |                      |                    |  |
|                                |  | FOR OFFICIAL USE ONL | <u>Y</u>           |  |
| Application received: Fee paid |  |                      |                    |  |
| Approved for the period        |  |                      |                    |  |
| Not approved for reasons       |  |                      |                    |  |
| LICENCE No.                    |  |                      |                    |  |
|                                |  |                      |                    |  |
|                                | Date   |                      | ontroller of Seeds |  |

Form XIII

(Regulation 15(1))
(To be completed in triplicate)



#### REPUBLIC OF ZAMBIA

The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

The Plant Variety and Seeds Regulations, 2018

#### SEED ANALYST'S LICENCE

LICENCE No. ....

| Date   | Controller of Seeds |
|--|---------------------|
|  |                     |
|  |                     |
| This Licence is issued subject to the conditions | below:              |
|  |                     |
| for the period                                   | to                  |
|  |                     |
|  |                     |
| of (Employer's name and address):                |                     |
|  |                     |
|  |                     |
|  |                     |
|  |                     |
|  | ,                   |
| A Seed Analyst's Licence is hereby granted to (  | Name and address):  |

#### **CONDITIONS**

- 1. Seed analyses shall be conducted in accordance with Regulation 22.
- 2. The licence is valid for twelve months.
- 3. The Controller of Seeds may revoke or suspend this licence without notice if he is satisfied that the holder of the licence has conducted himself in a manner inconsistent with these *Regulations*.
- 4. The holder of a licence shall be required to reapply to the licensing Authority in case of movement from one organisation to another within 21 days.

The Director,

To:

Form XIV (Regulation 16 (2)) (To be completed in triplicate)



#### REPUBLIC OF ZAMBIA

## The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

#### The Plant Variety and Seeds Regulations, 2018

#### APPLICATION FOR SEED TESTING LICENCE

| Seed Control and Certification Institute<br>P.O. Box 350199, CHILANGA, 13201. |                     |
|---|---------------------|
| Applicant's name and address:   |                     |
|   |                     |
| SPEC  | IFICATIONS          |
| Name and address of premises:   |                     |
| Species to tested:  |                     |
| Type of seed testing equipment (Please attach list).                          |                     |
|   |                     |
| Date  | Applicant           |
| FOR OFF   | ICIAL USE ONLY      |
| Application received: Fe Approved for the period                              | to                  |
|   |                     |
| LICENCE No.   |                     |
|   |                     |
| Date  | Controller of Seeds |

Form XV (Regulation 16 (1)) (To be completed in triplicate)



#### REPUBLIC OF ZAMBIA

The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

The Plant Variety and Seeds Regulations, 2018

#### SEED TESTING LICENCE

|                    | LICENCE No  |
|--------------------|---|
| A Seed Testing L   | icence is hereby granted to (Name and address):   |
|                    |   |
| of (Name and add   | dress of premises):   |
|                    |   |
| for the period     | to  |
| This Licence is is | sued subject to the conditions laid out below.  |
| <br>Date           | Controller of Seeds   |
|                    | CONDITIONS  |
| Regulation 24.     | A licensed seed testing station shall:-   |
| (a)                | be housed in premises approved by the Controller of Seeds and shall be equipped in accordance with requirements specified. No change shall be made without prior approval of the Controller of Seeds to the accommodation or equipment of the |
|                    | station, except replacement of consumable stores.   |
| (b)                | be in the charge of a licensed seed analyst.  |
| (c)                | record the results of the seed test on a certificate in Form 18 set out in the Seventh Schedule   |
| (d)                | make available to the certifying authority every sample tested for random sampling as specified in the ISTA rules.  |
| (e)                | state in the certificate whether the seeds are marketable and the category of the seeds.  |
| <i>(f)</i>         | make records available for inspection by the Institute at all reasonable times.   |
| <i>(g)</i>         | be subject to supervision by the Institute and shall at all times maintain a level of performance satisfactory to the Controller of Seeds in the tests which it undertakes.   |

Form XVI (Regulation 17 (2)) (To be completed in triplicate)



# REPUBLIC OF ZAMBIA

# The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

# The Plant Variety and Seeds Regulations, 2018

## APPLICATION FOR SEED PROCESSING LICENCE

| To:     | The Director,                         |                       |
|---------|---------------------------------------|-----------------------|
|         | Seed Control and Certification Instit | ute                   |
|         | P.O. Box 350199, CHILANGA, 132        | 201.                  |
| Applica | unt's name and address:               |                       |
|         |                                       |                       |
|         |                                       | SPECIFICATIONS        |
| Name a  | nd address of premises:               |                       |
|         |                                       |                       |
| Type of | f cleaning facilities:                |                       |
|         |                                       |                       |
|         |                                       |                       |
|         |                                       |                       |
| Dotos   | Ç: an                                 | ature:                |
| Date:   | Sign                                  | ature:                |
|         |                                       | FOR OFFICIAL USE ONLY |
| Applica | ution received:                       | Fee paid              |
| Approv  | ed for the period                     | to                    |
|         |                                       |                       |
| Inspect | ed by:                                | Date:                 |
| LICEN   | ICE No.                               |                       |
|         |                                       |                       |
|         | D .                                   |                       |
|         | Date                                  | Controller of Seeds   |

Form XVII
(Regulation 17 (1))
(To be completed in triplicate)



### REPUBLIC OF ZAMBIA

# The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

The Plant Variety and Seeds Regulations, 2018

### PROCESSING LICENCE

LICENCE No: .....

| Date   | Controller of Seeds |
|--|---------------------|
|  |                     |
| This Licence is issued subject conditions below.       |                     |
| for the period:  | . to                |
| C  |                     |
|  |                     |
| is hereby granted to you for processing of seeds at (N | -                   |
| A Seed Processing License of the following crop(s):    |                     |
|  |                     |
| Name and address of seed processor:                    |                     |
|  |                     |

# CONDITIONS

- 1. Offer the machinery in the processing plant regularly for inspections.
- 2. Display this licence at the place of sale of seed.
- 3. Licence is valid for twelve months.
- 4. The Controller of Seeds or the Controller of Seeds representative shall have access to the processing premises at all times.
- 5. The Controller of Seeds may revoke or suspend this licence without notice if the Controller of Seeds is satisfied that the conditions for the licence have not been met.

The Controller of Seeds,

Date

To:

Form XVIII
(Regulation 18(2))
(To be completed in triplicate



## REPUBLIC OF ZAMBIA

# The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

The Plant Variety and Seeds Regulations, 2018

## APPLICATION FOR SEED SELLER'S LICENCE

| Seed Control and P.O. Box 350199,  |           |                                    |                  |        |                   |
|--|-----------|------------------------------------|------------------|--------|-------------------|
| Applicant's name:  |           | Email add                          | lress            |        |                   |
|  | Reta      | olesale<br>hil<br>olesale and reta | il               |        |                   |
| Name of premises:  |           |                                    |                  | D      | vistrict          |
| Date:  |           | Signature: .                       |                  |        |                   |
|  |           |                                    | FOR OFFICE       | AL USE | <u>ONLY</u>       |
| Attachments: Council tradin  | g licence | Registra                           | tion certificate |        | ZRA tax clearance |
| Application received: Premises inspected by Approved for the period Not approved for reasons LICENCE No. |           | Application c                      | hecked by        |        |                   |
|  |           |                                    |                  |        |                   |

For/Controller of Seeds



Form XIX (Regulation 18 (1))(To be completed in triplicate)

### REPUBLIC OF ZAMBIA

The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

The Plant Variety and Seeds Regulations, 2018

SEED SELLER'S LICENCE

| LICENO | TE No.  |  |
|--------|---------|--|
|        | .r. NO: |  |

| A Seed Seller's Licence of the following class(es): is hereby granted to you for sale of seeds at (Name | e and address of premises): |
|---|-----------------------------|
|   | to                          |
| <br>Date  | Controller of Seeds         |

## CONDITIONS

- Offer the seed for re-test before the expiry date of the current certification. 1.
- 2. Store seed in a clean, cool and dry place.
  Display this licence at the place of sale of seed.
- Licence is valid for twelve months.
- 5. The Controller of Seeds or Controller of Seeds representative shall have access to the processing premises at all times.

1.

The Controller of Seeds may revoke or suspend this licence without notice if Controller of Seeds is satisfied that the conditions for the licence have not been met.



## REPUBLIC OF ZAMBIA

# The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

# The Plant Variety and Seeds Regulations, 2018

# SEED WAREHOUSE INSPECTION REPORT

| Name of applicant:                 | •••••   |   | • |
|------------------------------------|---|---|---|
| Postal address:                    |   |   |   |
| Telephone number:                  |   |   |   |
| Name of premises:                  |   |   |   |
| Physical address:                  |   |   |   |
| INSPECTION RESULTS                 |   |   |   |
| Warehouse Condition<br>Roof/Walls: | □ Ok  | □ Not ok  |   |
| Floor:                             | □ Ok  | □ Not ok  |   |
| Ventilation:                       | □ Ok  | □ Not ok  |   |
| Storage facilities:                | □Ok   | □ Not ok  |   |
| General Remarks                    |   |   |   |
| □ Not approved for licensing       | vn □ License susper<br>g<br>d/confiscated □ Rec | nded   Approved for licensing commended for destruction | g:                                      |
| Date                               |   |   |   |
| Signature of Stockist              |   | Signature of In   |   |

Form XXI (Regulation 21 and 31) (To be completed in triplicate)



## REPUBLIC OF ZAMBIA

# The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

# The Plant Variety and Seeds Regulations, 2017

## SAMPLING AND SEALING REPORT

## Report No....

| Applicant's nan<br>Applicant's add<br>Registration No<br>Certification No<br>Species:<br>Intended seed of | ne:         |        | Cultivar:Grade:  |                              |   |
|---|-------------|--------|------------------|------------------------------|---|
| Test  | Germination | Purity | Moisture Content | Number Determination         | Others (specify)                        |
| Tick  |             |        |                  |                              | ` • • • • • • • • • • • • • • • • • • • |
| Certification   |             |        |                  |                              |   |
|   | OECD        | SADC   | COMESA           | National                     | For Information                         |
| Tick  |             |        |                  |                              |   |
| If Yes state ran<br>Type of sealing   | ge          |        |                  |                              |   |
|   |             |        |                  |                              |   |
|   |             |        |                  |                              |   |
|   |             |        |                  |                              |   |
| Signature of Gr   |             |        | Signa            | ture and No. of sampler/Insp | ector                                   |

Form XXII (Regulation 23 (d), 24 (1) (d) and 25 (2)) (To be completed in triplicate)



## REPUBLIC OF ZAMBIA

Plant Varieties and Seeds Act Laws, Volume 14, Cap 236)

## The Plant Variety and Seeds Regulations, 2018

## CONTROL GROWING REPORT – GENERAL SEEDS

# REPORT NO .....

| Specie:               | Cultivar                |
|-----------------------|-------------------------|
| Applicant:            |                         |
| Farm:                 |                         |
| Grower:               | Registration No:        |
| Certification Number: | . Seed Lot No:          |
| Seed Class:           | Date of Planting:       |
|                       |                         |
| TEST RESULTS          |                         |
| Other Crop Plants:    |                         |
|                       |                         |
| Off Types:            |                         |
|                       |                         |
|                       |                         |
| Diseased Plants:      |                         |
|                       |                         |
| Weeds:                |                         |
|                       |                         |
| Cultivar Purity:      |                         |
|                       |                         |
| Remarks:              |                         |
|                       |                         |
|                       |                         |
|                       |                         |
| Date                  | For/Controller of Seeds |

Form XXIII (Regulations 25) (To be completed in triplicate

For/Controller of Seeds



### REPUBLIC OF ZAMBIA

# The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

# **The Plant Variety and Seeds** *Regulations, 2018*

# CONTROL GROWING REPORT - POTATO SEEDS REPORT No. .....

Date

Form XXIV (Regulation 26) (To be completed in triplicate)



## REPUBLIC OF ZAMBIA

The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

The Plant Variety and Seeds Regulations, 2018

## PEST POST CONTROL REPORT - POTATO SEEDS

|                  | REPORT                   | 7 No                    |
|------------------|--------------------------|-------------------------|
| To:              |                          |                         |
|                  |                          |                         |
|                  |                          |                         |
| •••••            |                          |                         |
| Cultivar:        |                          |                         |
| Registration No: | Seed Class:              |                         |
| Seed Lot No:     | Number of tubers tested: |                         |
| Grower:          |                          |                         |
|                  |                          |                         |
|                  |                          |                         |
|                  |                          |                         |
| DEFECTS:         | TEST RESULTS             | <b>S</b>                |
| <u>Number</u>    | Kind                     | Percentage by           |
|                  |                          |                         |
|                  |                          |                         |
| Remarks:         |                          |                         |
|                  |                          |                         |
|                  |                          |                         |
|                  |                          |                         |
|                  |                          |                         |
|                  |                          |                         |
| Date             | 1                        | For/Controller of Seeds |

Form XXV (Regulation 27) (To be completed in triplicate)



# REPUBLIC OF ZAMBIA

# The Plant Variety and Seeds Act

(Laws, Volume 14, Cap. 236)

# The Plant Variety and Seeds Regulations, 2018

## TUBER CONTROL REPORT - POTATO SEEDS

|                        | R                | REPORT No       | •• |
|------------------------|------------------|-----------------|----|
| То:                    |                  |                 |    |
|                        |                  |                 |    |
| Cultivar:              | Registration No: | Seed Class:     | :  |
| Seed Lot No:           |                  |                 |    |
| DEFECTS:               |                  | TEST RESULTS    |    |
| Kind                   | Percentage       | Index           |    |
|                        |                  |                 |    |
|                        |                  |                 |    |
| Remarks:               |                  |                 |    |
| Date                   |                  |                 |    |
| Signature of Applicant |                  | of Inspector    |    |
|                        |                  | Inspector's No. |    |

Form XXVI (Regulation 34) (To be completed in triplicate)



## REPUBLIC OF ZAMBIA

# The Plant Variety and Seeds Act

(Laws, Volume 14, Cap. 236)

# The Plant Variety and Seeds

Regulations, 2018

## SEED IMPORT PERMIT

| Post Address: Physical Business Address:  |
|---|
| SPECIFICATIONS  |
| Species:  Cultivar:  Quantity to be imported:  (in words)   |
| Country of origin:  |
| Status of variety in Zamoia. Recasedvoi released re Recasedothers (specify)   |
| Official marks of the seed lot:  Quality of seed (copy of seed certificates(s) to be enclosed):  Point of entry:  |
| Reasons for the importation:  |
| Expected date for the importation (please specify):   |
| Currently genetically modified seeds are not permitted in Zambia     Seed into at permit, shall be given before the seed arrives in the country.                    |
| <ol> <li>Seed import permit shall be given before the seed arrives in the country</li> <li>Seed lot must be a companied with a phytosanitary certificate</li> </ol> |
| Seed lot must be accompanied with an international seed testing association/national certificate  |
| <ol><li>The Institute and plant protection unit must be notified before seed is<br/>distributed</li></ol>   |
| <ul><li>6. The Institute shall draw a seed sample for testing and reference purposes</li><li>7. This seed import permit is for a single entry only</li></ul>        |
| Date: Signature of Applicant: Notification received: Fees paid Notification approved/rejected Notification No.  |

Date: Signature (Controller of Seeds):

To: The Secretary, Variety Release Committee, Seed Control and Certification Institute

Form XXVII (Regulation 41) (To be completed in triplicate)



### REPUBLIC OF ZAMBIA

# The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

# The Plant Variety and Seeds

Regulations, 2018

## APPLICATION FOR NATIONAL VARIETY RELEASE TRIALS (Pre-release; including DUS testing)

|                | . Box 350199, Chilanga 13201, Zambia                        |
|----------------|---|
|                | (1) 278170/278236 Fax: (1) 278170/826                       |
| E-m            | ail: Institute@zamnet.zm of seedresearch@zamnet.zm          |
|                |   |
|                |   |
| 1.             | Name & Address of Applicant:                                |
| C <sub>n</sub> | anian:  |
| Sp             | ecies:  |
| 2.             | Preliminary designation:                                    |
| 3.             | Parentage:  |
| 4.             | Genetic origin, breeding methods etc:                       |
| 5.             | Maturity group (Early, Medium, Late):                       |
| 6.             | Grain type (Dent, semi dent, flint, colour, etc):           |
| 7.             | Type of release* (General, specific i.e. Regions I,II,III): |
| 8.             | Quantity of seed submitted (seed over leaf):                |
| 9.             | Botanical characteristics. Detailed information.            |
| 10.            | Date Sample submitted <sup>1</sup> :                        |
|                |   |
|                | FOR OFFICIAL USE ONLY                                       |
| Date and       | plication received:   |
| Date app       | meation received.   |
| Date see       | d sample received:  |
|                | 1   |
| Date Fee       | es/Amount paid:   |
|                |   |

<sup>&</sup>lt;sup>1</sup> The application should be accompanied by an affidavit that the seed submitted is NOT GMO

Form XXVIII (Regulation 44) (To be completed in triplicate)



## REPUBLIC OF ZAMBIA

# The Plant Variety and Seeds Act (Laws, Volume 14, Cap. 236)

# The Plant Variety and Seeds Regulations, 2018

## APPLICATION FOR VARIETY RELEASE

| \<br>S<br>H                                   | The Secretary, Tariety Release Committee, eed Control and Certification Institute, O. Box 350199, Chilanga 13201, Zambia el: (1) 278170/278236 Fax: (1) 278170/836 -mail: scci@zamnet.zm or seedresearch@zamnet.zm   |
|---|--|
| 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9     | Breeder (Institution, Country):  Representative:  Species:  Preliminary designation/Code name:  Proposed variety name:  Parentage:  Genetic origin, breeding methods etc:  |
| 1:<br>1:<br>1:<br>Da<br>No                    | Reason(s) for application: Distinctness, Uniformity, Stability test results from the Institute National Variety Release Trials results from the Institute Any other information that may support your application Signature:  1. Submit 20 copies each application   |
| Attach<br>Applic<br>Premis<br>Appro<br>Not ap | ments: Council trading licence Registration certificate ZRA tax clearance ation received: Fee paid Application checked by Application checked by Application checked by Registration checked by Application checked by Registration certificate ZRA tax clearance residence in the period Registration certificate ZRA tax clearance residence in the period Registration certificate ZRA tax clearance residence in the period Registration certificate Regis |
|   | Date For/Controller of Seeds   |

### SECOND SCHEDULE

(Regulation 5)

#### PRESCRIBED SEEDS

### CEREALS:

Barley Hordeum vulgare L. sensu lato

Maize Zea mays L.

Millet (Finger) Eleusine coracana (L.) Gaertn.

Millet (Pearl) Pennisetum typhoides (Burm. f.) Stapf et C.E. Hubb

Oats Avena sativa L Rice Oryza sativa L. Rye Secale cereale L.

Sorghum Sorghum bicolor (L) Moench Triticale X Tritico secale Wittm

Wheat Triticum aestivum L. emend, Fiori et Paol.

### FIBRE CROPS:

Cotton Gossypium L spp. Flax Linum usitatissimum L. Kenaf Hibiscus cannabinus L.

### HERBAGE GRASSES:

Brachiaria Brachiaria ruziziensis Columbus grass Cenchrus ciliaris L. Buffel grass Sorghum almum L. Parodi Guinea grass Panicum maximum jacq. Paspalum grass Paspalum spp. Rhodes grass Chloris gayana Kunth Rye grass Lolium perenne L. Setaria italica (L.) Beauv. Setaria grass Teff grass Eragrotstis tef Trotter

Weeping love grass Eragrostis curvula (Schrad.) Nees

## HERBAGE LEGUMES:

Centrosema pubescens Benth. Centro

Trifolium spp. Clover

Desmodium mtortun(Mill) Urban Desmodium

Glycine javanica L. Glycine

Desmodium intortum (Mill.) Urban. Leucaena leucocephala (Lam.) de Wit Greenleaf desmodium Leucaena Medicago sativa L. Lucerne

Desmodium uncinatum (jacq.) DC. Silverleaf des modium

Macroptilium atropurpureum (DC.) Urban. Siratro Stylosanthes guianensis (Aubl.) Sw. Stylo

Crotalaria juncea L Sunnhemp

### **PULSES:**

Bean (including Bush, Pole, French, Haricot) Phaseolus vulgaris L. Broad beans Vicia faba L. Chick pea Cicer arietinum L.

Common vetch Vicia sativa L. (incl. Vicia angustifolia Reichard)

Cowpea Vigna unguiculata (L.) Walp. Dolichos bean Dolichos lablab L.

Peas (including Garden, Field, Sugar) Pisum sativum L. sensu lato Pigeon pea Soyabean Cajanus cajan (L.) Huth Glycine max (L.) Merr.

Mucuna deeringiana (Bort) Merr. Velvet bean

ROOT CROPS:

Beets (including Mangel, Sugar, Spinach)

Irish Potato (tuber)

Swede Turn ip

Sweet Potato

Cassava

Yam

Beta vulgaris L.  $Solanum\,tuberosum\,L.$ 

Brassica napus L. var. napobrassica (L.) Reichb.

Brassica rapa L. Ipomea batatas

Manihot esculenta Grantz

Dios corea spp

STIMULANT CROPS:

Tobacco

Coffee

Nicotiana tabacum L.

Coffea spp.

**VEGETABLES:** 

Amaranth

Bean (including Bush, Pole, French, Haricot)

Broad beans

Beets (including Mangel, Sugar, Spinach)

Broccoli Brussels sprouts Cabbage

Cauliflower

Celery Chinese cabbage

Cucumber (including gherkins)

Dill Eggplant

Amaranthus spp. Phaseolus vulgaris L. Vicia faba L.

Beta vulgaris L.

Brassica oleracea convar. botrytis (L.) Alef. Var. cymosa Duch. Brassica oleracea lonvar. olarecea var.

gemmifera DC. Brassica oleracea L. Daucus carota L.

Brassica oleracea lonvar. botrytis (L)

Alef. var. botrytis L. Apium graveolens L. Brassica pekinensis (Lour).

Rupr. (including Brassica chinensis L)

Cucumis sativus L. Anethum graveolens L. Solanum melongena L.

VEGETABLES (Contd):

Endive Impwa

Kale

Kohlrabi

Leek Lettuce Lusakasaka Muskmelon Okra

Onion Parsley Parsnip Peas

Pepper Potato Pumpk in Radish Rape

Rhubarb

Cichorium endivia L.

Solanum macro carpum L

Brassica oleracea covar. acephala (DC.) Alef. var.

medullosa Thell + var. viridis L. Brassica oleracea convar. acephala (DC.)

Alef. var. Gongylodes

Allium porrum L. Lactuca sativa L. Corchrus tridens L. Cucumis melo L. Hibiscus esculentus L Allium cepa L.

Petroselinum crispum (P. Mill.) Nym. ex A. W. Hill

Pastinaca sativa L Pisum sativum L. sensu lato Capsicum annuum L. Solanum tuberosum L.  $Cucurbita\ pepo\ L.$ Raphanus sativus L. Brassica napus L. Rheum rhaponiticum L.

## VEGETABLES (Contd):

Spinach Spinacea oleracea L. Cats whiskers (Suntha) Spinacea oleracea L. Cleome gynandra L.

SwedeBrassica napus var. napobrassicaSweet cornZea mays L. var. saccharatumSwiss chardBeta vulgaris var. vulgaris

Squash Cucurbita moschata (Duch) Duch ex. Poir.
Tomato Lycopersicum (L.) Karst. Ex Farw.

Turnip Brassica rapa L.

Water melon Citrullus lanatus (Thunb) Matsum et Nakai

Black jack Bidens Pilosa

**HERBS** 

Sweet worm wood Artemisia (annua) spp Moringa Moringer alifera

# THIRD SCHEDULE $(Regulation\ 6)$

# SEEDS FOR COMPULSORY CERTIFICATION

- 1 2. All hybrid crops Irish Potatoes
- 3. Open pollinated varieties of the following:
  - (a) Sorghum
  - (b Wheat
  - (c) Soya beans (d) Sunflower

\

# FOURTH SCHEDULE

 $(Regulation \, 6(3))$ 

## A. SEED CERTIFICATION SCHEME - for General Seeds

| CODE | CLASS                                      | PARENT SEED AND AVAILABILITY   | COLOUR OF LABEL        |
|------|--|--|------------------------|
| A    | Pre-basic Seed                             | Produced from the breeder's parent material under control of the breeder and supervision of the Institute. More than one generation may be permitted by the Controller of Seeds. | Violet stripe on white |
| В    | Basic Seed                                 | Produced from Pre-basic Seed and officially inspected. Only one generation permitted.  | White                  |
| C1   | Certified Seed, 1st<br>generation          | Produced from Basic Seed and officially inspected.   | Blue                   |
| C2   | Certified Seed, 2 <sup>nd</sup> generation | Produced from Certified Seed, 1 <sup>st</sup> generation (or higher class) and officially inspected.   | Red                    |
| C3   | Certified Seed, 3 <sup>rd</sup> generation | Produced from Certified Seed, 2 <sup>nd</sup> generation (or higher class) and officially inspected.   | Red stripe on white    |
| D    | Certified Seed, 4 <sup>th</sup> generation | Produced from Certified Seed, 3 <sup>rd</sup> generation (or higher class) and officially inspected.   | Green stripe on white  |
| QDS  | Quality Declared seed                      | Produced from Quality Declared or Higher class   | Green                  |
| Е    | Emergency class                            | Only used when a serious shortage of seed (for certification) of compulsory crops occurs. The standards will be set by the Controller of Seeds.                                  | Yellow                 |

|               | В   | 8. SEED CERTIFICATION SCHEME - for Potato Seeds  |                        |
|---------------|---|--|------------------------|
| CODE          | CLASS   | PARENT SEED AND AVAILABILITY   | COLOUR OF LABEL        |
| S1(S2,S<br>3) | Pre-basic Seed                                | Produced by the breeder under the supervision of the Institute. The maximum number of generations shall not exceed three, as determined by the Controller of Seeds; and such number of generation shall form part of the identification. | Violet stripe on white |
| SE            | Basic Seed                                    | Produced from Pre-basic Seed under the supervision of the Institute. Only one generation permitted.  | White                  |
| E1            | Certified Seed, 1 <sup>st</sup> generation    | Produced from Basic Seed and officially inspected.   | Blue stripe on white   |
| E2            | Certified Seed,<br>2 <sup>nd</sup> generation | Produced from Certified Seed, $1^{st}$ generation (or higher class) and officially inspected.  | Red stripe on white    |
| A             | Certified Seed, 3 <sup>rd</sup> generation    | Produced from Certified Seed, 2 <sup>nd</sup> generation (or higher class) and officially inspected.   | Red stripe on white    |
| В             | Certified Seed, 4 <sup>th</sup> generation    | Produced from Certified Seed,3 <sup>rd</sup> generation (or higher class) and officially inspected.  | Green stripe on white  |

# FIFTH SCHEDULE (Regulation 6)

# 1. STANDARDS FOR CERTIFIED SEED - for General Seeds

# A. Field Inspection

I. Minimum standards for isolation (metres), off types and/or other cultivars and inspections  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ 

|                | Is  | solation, 1 | netres ( | minimun                  | 1)  | Off         | types and | or other       | cultiva                            | rs (% by number)             |
|----------------|-----|-------------|----------|--------------------------|-----|-------------|-----------|----------------|------------------------------------|------------------------------|
| Species        | A   | В           | $C_1$    | C <sub>2</sub> , C<br>QI |     | A           | В         | $\mathbf{C}_1$ | C <sub>2</sub> ,<br>C <sub>3</sub> | D, QDS                       |
| Cereals:       |     |             |          |                          |     | <b>I.</b> I | Maximun   | numbe          | r per 10                           | M <sup>2</sup> (2500 plants) |
| Barley         | 10  | 10          | 5        | 5                        | -   | 5           | 5         | 10             | 30                                 | 50                           |
| Oats           | 10  | 10          | 5        | 5                        | -   | 5           | 5         | 10             | 30                                 | 50                           |
| Rice           | 10  | 5           | 5        | 5                        | 5   | 5           | 5         | 7              | 7                                  | 50                           |
| Rice H         | 200 | 200         | 100      |                          |     | 3           | 3         | 5              |                                    |                              |
| Rye            | 400 | 400         | 200      | 200                      | -   | 10          | 10        | 20             | 60                                 | 100                          |
| Triticale      | 20  | 20          | 10       | 10                       | -   | 10          | 10        | 20             | 60                                 | 100                          |
| Wheat          | 15  | 10          | 5        | 5                        | 5   | 3           | 5         | 10             | 10                                 | 50                           |
|                |     |             |          |                          |     | II.         | Maximur   | n numbe        | r per 10                           | 00 plants (heads)            |
| Maize (OPV)    | 400 | 400         | 200      | 200                      |     | 1           | 5         | 10             | 10                                 | 10                           |
| Maize (H)      | 400 | 400         | 200      | 200                      |     | 1           | 1         | 3              | _                                  |                              |
| Millet, Finger | 50  | 50          | 25       | -                        | -   | 2           | 2         | 5              | 5                                  | _                            |
| Millet, Pearl  | 400 | 400         | 200      | 25                       | 20  | 5           | 5<br>2    | 5              | 5                                  | 20                           |
| Sorghum (OP)   | 400 | 400         | 200      | 200                      | 200 | 2           | 2         | 5              | 5                                  | 5                            |
| Sorgium (OI)   |     |             |          | 200                      | 100 |             |           |                |                                    | 10                           |
| Sorghum (H)    | 400 | 400         | 200      | 200                      |     | 2           | 2         | 5              | 5                                  |                              |

| Pulses:                            |                  |                          |                   |               |                     |             | I. Maximur  | n number per 10  | ) square m       | eters       |  |
|------------------------------------|------------------|--------------------------|-------------------|---------------|---------------------|-------------|-------------|------------------|------------------|-------------|--|
| Common<br>vetch<br>Soybean<br>Peas | 100<br>10<br>100 | 10<br>0<br>10<br>10<br>0 | 50<br>5<br>50     | 50<br>5<br>50 | 5<br>20             | 1<br>1<br>1 | 1<br>1<br>1 | 2<br>2<br>2<br>2 | 2<br>2<br>2<br>2 | 5<br>5<br>5 |  |
| Pigeon peas                        | 400              | 40<br>0                  | 20<br>0           | 200<br>100    |                     | 1           | 1           | 1                | 2                | 5           |  |
|                                    |                  |                          |                   |               |                     |             | II. Maximun | number per 10    | 00 plants (l     | heads)      |  |
| Beans<br>Broad bean<br>Cowpea      | 10<br>200<br>10  | 10<br>20<br>0<br>10      | 5<br>10<br>0<br>5 | 5<br>100<br>5 | 5<br>25<br><b>5</b> | 2<br>1<br>2 | 6<br>1<br>2 | 6<br>2<br>5      | 6<br>2<br>5      | 8<br>5<br>5 |  |

|                    |      | 1000         | Minir                       | num stand | ards for isola    | tion (metres | Minimum standards for isolation (metres), off types and/or other cultivars | d/or other cult                  | ivars                                      |            |
|--------------------|------|--------------|-----------------------------|-----------|-------------------|--------------|--|----------------------------------|--|------------|
|                    |      | Isolation, m | Isolation, metres (minimum) | (Wn       |                   |              | Ō  | Off types and/or other cultivars | ther cultivars                             |            |
| Species            | A    | В            | $C_1$                       | C2, C     | $C_2, C_3, D$ QDS | A            | В  | $C_{\rm l}$                      | $C_1, C_3$                                 | D, QDS     |
| Oil crops:         |      |              |                             |           |                   |              | II. Maxin  | num number pe                    | II. Maximum number per 1000 plants (heads) |            |
| Castor bean        | 20   | 05           | 36                          | 30        | -                 | -            | -  | ŗ                                | ŗ  | v          |
| Groundnut          | 801  | 00           | J v                         | g v       | 2. ~              |              | , ,  | 10                               | 10   | ) <b>(</b> |
| Oilseed rane       | 1000 | 1000         | 009                         | 400       | 400               | · (1         | 1 (1   | ı vo                             | ı vo                                       | 10         |
| Sunflower(OP)      | 1000 | 1000         | 800                         | 800       | 800               | 2            | 2  | Ś                                | Ś  | 5          |
| Sunflower (H)      | 3000 | 2500         | 1500                        | 1         |                   | 2            | 2  | S                                | •  | ı          |
| Fibre crops:       |      |              |                             |           |                   |              | II. Maxin  | num number pe                    | II. Maximum number per 1000 plants (heads) |            |
| Cotton (OP)        | 100  | 100          | 100                         | 100       | 100               | 1            | 2  | ю                                | ς.   | S          |
| Cotton (H)         | 500  | 500          | 400                         |           |                   | 1            | ю  | ĸ                                | 1  | 1          |
|                    |      |              |                             |           |                   |              | I. Maxi  | mum number pe                    | I. Maximum number per 10 square meters     |            |
| Пах                |      |              |                             |           |                   |              |  | •                                | •  |            |
| June A             | 20   | 20           | 10                          | 10        | 10                | S            | 5  | 10                               | 30   | 50         |
| Nenar              | 009  | 009          | 300                         | 300       | 300               | -            | -  | 2                                | 2  | 5          |
| Root crops:        |      |              |                             |           |                   |              | II. Maxin  | num number pe                    | II. Maximum number per 1000 plants (heads) |            |
| Beets              | 0000 | 0006         | 0021                        | 9001      | 0001              | -            | -  | r                                | r  | ų          |
| Swede              | 1000 | 1000         | 009                         | 400       | 400               | -            | · -  | 1 C                              | 1 C  | o v        |
| Turnip             | 1000 | 1000         | 009                         | 400       | 400               | 1.           |  | 1 71                             | 1 2  | , v        |
| Herbage grasses:   |      |              |                             |           |                   |              | I. Maxi  | mum number pe                    | I. Maximum number per 10 square meters     |            |
| Buffel grass       | 200  | 200          | 100                         | 100       | 100               | -            | _  | C                                | 6  | V          |
| Guinea grass       | 50   | 50           | 25                          | 10        | 10                | -            |  | 1 (1                             | ı (1                                       | · v        |
| Rhodes grass       | 200  | 200          | 100                         | 100       | 100               |              | -  | 7                                | 1 73                                       | 5          |
| Rye grass          | 400  | 400          | 200                         | 200       | 200               | 1            | 1  | 2                                | 71   | <b>.</b> C |
| Weeping love grass | 50   | 50           | 25                          | 10        | 01                | -            | 1  | 7                                | 2  | 5          |
| Herbage legumes:   |      |              |                             |           |                   |              | I. Maxir   | num num ber pe                   | I. Maximum num ber per 10 square meters    |            |
| Glycine            | 300  | 300          | 200                         | 200       | 200               | _            | _  | 2                                | 2  | v          |
| Siratro            | 200  | 200          | 100                         | 100       | 100               | - 1          | -  | 2                                | 2  | ν.         |
| Stylo              | 200  | 200          | 100                         | 100       | 100               | 1            | 1  | 2                                | 2  | 5          |

| A. Field Inspection (contd)             | tion (contd) | I. Minim       | um standard                    | I. Minimum standards for isolation (metres). off tynes and/or other cultivars | es). off types an | nd/or other cul | fivars                                 |  |          |
|---|--------------|----------------|--------------------------------|---|-------------------|-----------------|--|--|----------|
|   |              | I. Isolation   | I. Isolation, metres (minimum) | nimum)  |                   | Off             | Off types and/or other cultivars       | ther cultivars                             |          |
| Species                                 | Ą            | В              | C                              | $C_2, C_3, D, QDS$  | A                 | В               | $C_1$                                  | $C_2, C_3$                                 | D, QDS   |
| Herbage legumes:                        |              |                |                                |   |                   | II. Maximum     | number per 10                          | II. Maximum number per 1000 plants (heads) |          |
| Clover<br>Lucerne<br><b>Vegetables:</b> | 400<br>400   | 4 00<br>4 00   | 300                            | 300<br>300  |                   |                 | ოო                                     | 10   | 15<br>15 |
| Peas                                    |              |                |                                |   |                   | I. Maximun      | f. Maximum number per 10 square meters | square meters                              |          |
|   | 100          | 100            | 50                             | 50  | 1                 | 1               | 2                                      | 3  | 5        |
| Beets                                   |              |                |                                |   |                   | II. Maximum     |  | number per 1000 plants (heads)             |          |
| Carrot                                  | 2000         | 2000           | 1500                           | 1500  | 1                 | 1               | 2                                      | 2  | 5        |
|   | 1000         | 1000           | 009                            | 400   | 2                 | 2               | 5                                      | 5  | 10       |
| Cauliflower                             | 1000         | 1000           | 750                            | 200   | 2                 | 2               | 10                                     | 10   | 20       |
| Kale                                    | 1000         | 1000           | 009                            | 400   | 2                 | 2               | S                                      | 5  | 10       |
| Leek                                    | 1000         | 1000           | 009                            | 400   | 2                 | 2               | 5                                      | 5  | 10       |
| Lettuce                                 | 1500         | 1500           | 1000                           | 009   | 5                 | 5               | 10                                     | 10   | 20       |
| Onion                                   | 100          | 100            | 50                             | 2.5   | 2                 | 2               | 10                                     | 15   | 30       |
| Demon                                   | 1500         | 1000           | 800                            | 0 0 9   | 5                 | 5               | 10                                     | 10   | 20       |
| repper                                  | 200          | 200            | 100                            | 50  | -                 | 1               | 2                                      | 2  | 5        |
| Pumpkin                                 | 1000         | 1000           | 800                            | 0.09  | 2                 | 2               | 10                                     | 15   | 30       |
| Rape                                    | 1000         | 1000           | 009                            | 400   | 2                 | 2               | 5                                      | 5  | 10       |
| Sweet corn                              | 400          | 400            | 200                            | 200   | -                 | 1               | 3                                      | 3  | 10       |
| Tomato                                  | 100          | 100            | 50                             | 50  | 2                 | 2               | 5                                      | 10   | 20       |
| Water melon                             | 1000         | 1000           | 800                            | 009   |                   | -               | 2                                      | <b>ι</b> Ο                                 | 10       |
| Stimulant Crops:                        |              |                |                                |   |                   | II. Maximum     | number per 10                          | II. Maximum number per 1000 plants (heads) |          |
| Tobacco                                 | 800          | 800            | 400                            | 400   | 1                 | 2               | 5                                      | 5  | 5        |
|   | Note: White  | maize shall be | isolated from a                | maize shall be isolated from all classes of yellow maize as follows:-         | ize as follows:-  |                 |  |  |          |
|   | A-B          | 500 m          |                                |   |                   |                 |  |  |          |
|   | ر<br>رئان م  | 300 m          |                                |   |                   |                 |  |  |          |

# A. Field Inspection (contd)

# I. Isolation, barriers (pollen parent rows)

# Minimum standards for maize.

| A-B               | $C_1$ - $C_3$     | Number of border rows |
|-------------------|-------------------|-----------------------|
| Above 400 metres  | Above 200 metres  | 0                     |
| 380 to 400 metres | 190 to 200 metres | 1                     |
| 360 to 380 metres | 180 to 190 metres | 2                     |
| 340 to 360 metres | 170 to 180 metres | 3                     |
| 320 to 340 metres | 160 to 170 metres | 4                     |
| 300 to 320 metres | 150 to 160 metres | 5                     |
| 280 to 300 metres | 140 to 150 metres | 7                     |
| 260 to 280 metres | 130 to 140 metres | 9                     |
| 240 to 260 metres | 120 to 130 metres | 11                    |
| 220 to 240 metres | 110 to 120 metres | 13                    |
| 200 to 220 metres | 100 to 110 metres | 15                    |

# II. Isolation, time (minimum)

| Species          | Time (days) |
|------------------|-------------|
| Cereals          |             |
| Maize            | 28          |
| Oilcrops         |             |
| Hybrid Sunflower | 15          |

# III. Minimum number of inspections

| Crop         | Minimum number of<br>Inspections | Minimum number of Inspections |
|--------------|----------------------------------|-------------------------------|
|              | Basic                            | Certified                     |
| Groundnuts   | 3                                | 2                             |
| Pigeon peas  | 3                                | 3                             |
| Soybeans     | 3                                | 3                             |
| Cotton H     | 3                                | 3                             |
| Cotton OP    | 3                                | 3                             |
| Sunflower OP | 3                                | 3                             |
| Sunflower H  | 3                                | 3                             |
| Tobacco      | 3                                | 3                             |
| Rice         | 2                                | 2                             |
| Rice H       | 3                                | 3                             |
| Pearl Millet | 3                                | 3                             |
| Beans        | 3                                | 3                             |
| Sorghum OP   | 3                                | 3                             |
| Sorghum H    | 3                                | 3                             |
| Wheat        | 2                                | 2                             |
| Cowpeas      | 3                                | 3                             |
| Maize OP     | 3                                | 3                             |
| Maize H      | 5                                | 5                             |
| Cassava      | 3                                | 3                             |
| Sweet potato | 3                                | 3                             |

**NOTE**: For other crops, the minimum number of inspections shall be three (3)

# (III) Vegetatively Propagated Crops

# (a) Sweet potato

| -  |                         |
|--|-------------------------|
| (1) Minimum Rotation (years)                         | 1 1 2                   |
| (2) Minimum Isolation (meters)                       | 10 10 5                 |
| (3) Maximum permitted Ratoons (Number)               | 1 2 2                   |
| (4) Varietal Purity                                  |                         |
| - Minimum sample size (counts/Lima)                  | 5x50 5x50 5x50 plants   |
| - Maximum off-types (% by number)                    | 0.5 1 2                 |
| (5) Diseases (Maximum incidence)                     |                         |
| - Sweet potato Virus disease (% by number of plants) | 0.5 0.5 5               |
| (6) Pests (Maximum infestation)                      |                         |
| - Sweet potato weevils (% by number of plants        | 0                       |
| (7) Harvesting age of seed crop                      |                         |
| - new crop   | 2-3 months              |
| - ratoon crop  | 3 weeks                 |
| (8) Size of planting material                        |                         |
| - Length of stake/vine                               | 20 – 30 cm (from tip) 5 |
| - Diameter of stake/vine                             |                         |
| - Number of nodes/duds                               |                         |

# (a) Cassava

| SEED QUALITY PARAMETERS                          | - A/B      | - C1/C2    | - QDS      |
|--|------------|------------|------------|
| Minimum rotation (years/seasons)                 | - 1        | - 1        | - 1        |
| Minimum isolation (m)                            | - 10       | - 5        | - 5        |
| Minimum distance between varieties (m)           | - 3        | - 3        | - 3        |
| Maximum permitted ratoons                        | - 3        | - 3        | - 3        |
| Varietal purity (%) (Observe 60 counts)          | - 0.5      | - 1        | - 2        |
| Cassava mosaic disease – Max incidence (%)       | - 0.5      | - 1        | - 2        |
| Cassava bacterial blight – Max mean severity     | - 3.5      | - 3.5      | - 3.5      |
| Cassava brown streak disease – Max incidence (%) | - 0        | - 0        | - 0        |
| Cassava mealybug – Max incidence (%)             | - 2        | - 2        | - 5        |
| Cassava green mite - Max mean severity           | - 3.5      | - 3.5      | - 3.5      |
| Scale insects – Max incidence (%)                | - 2        | - 2        | - 5        |
| Harvesting age – new crop                        | - 8-24mths | - 8-24mths | - 8-24mths |
| Harvesting age – ratoon crop                     | - 6-24mths | - 6-24mths | - 6-24mths |
| Minimum length of stake                          | - 20cm     | - 20cm     | - 20cm     |
| Minimum diameter of stake                        | - 2cm      | - 2cm      | - 2cm      |
| Minimum number of nodes/stake                    | - 5        | - 5        | - 5        |
| Maximum damaged nodes                            | - 10%      | - 10%      | - 10%      |
| Validity of certification                        | - 2mths    | - 2mths    | - 2mths    |

B. Laboratory tests
I. Quality requ

|                            | Purity<br>(% by we | Purity<br>(% by weight)        |      |     |     | Germination Capacity<br>(% by number) | mination Capad<br>(% by number) | city       |     | Weer<br>(ii) | ed seeds, exclud<br>noxious weeds<br>(number per kg) | Weed seeds, excluding<br>noxious weeds<br>(number per kg) | Moisture Content (%) |
|----------------------------|--------------------|--------------------------------|------|-----|-----|---------------------------------------|---------------------------------|------------|-----|--------------|--|---|----------------------|
| <b>Species</b><br>Cereals: | М                  | C <sub>1</sub> -C <sub>3</sub> | О    | QDS | A-B | C1-C3                                 | О                               | QDS        | A   | B            | C <sub>1</sub> -C <sub>3</sub>                       | Q   | A-D,QDS              |
| Barlev                     | 0.                 | 0.66                           | 0.86 | 86  | 95  | 06                                    | 06                              | 85         | -   | 2            | S  | 10  | 11.0                 |
| Maize (H)                  | 0                  | 0.66                           | ,    | ,   | 70  | 06                                    | ٠                               |            | _   | 2            | 5  | ,   | 13.0                 |
| Maize(OP)                  | 0                  | 0.66                           | 0.86 | 66  | 06  | 06                                    | 75                              | 70         | 90  | 5            | 150  | 200   | 13.0                 |
| Millet, Finger             | 0                  | 0.86                           | 0.86 | 26  | 80  | 80                                    | 85                              | 70         | 50  | 5            | 150  | 200   | 11.0                 |
| Millet, Pearl              | 0                  | 0.86                           | 0.86 | 76  | 7.5 | 80                                    | 80                              | 80         | -   | -            | 5  | 10  | 12.0                 |
| Oats                       | 0                  | 0.86                           | 0.86 | 86  | 85  | 85                                    | 80                              | 75         | _   | -            | 5  | 10  | 11.0                 |
| Rice(OP)                   | 0                  | 0.86                           | 0.86 | 26  | 80  | 80                                    | 70                              | 70         | _   | 0            | 5  | 150   | 13.0                 |
| Rice H                     | 0                  | 0.66                           |      |     | 70  | 80                                    | •                               |            | _   | 0            | 5  |   | 13.0                 |
| Rye                        | 0'                 | 0.86                           | 0.86 | 86  | 75  | 75                                    | 80                              | 80         | 20  | 0            | 100  | 10  | 11.0                 |
| Sorehum (H)                | 0                  | 0.86                           |      |     | 80  | 80                                    | •                               |            | -   | 7            | 5  |   | 12.0                 |
| Sorghum(OP)                | 0                  | 0.86                           | 0.86 | 80  | 80  | 80                                    | 80                              | 80         | _   | 7            | 5  | 10  | 12.0                 |
| Triticale                  | 0                  | 97.0                           | 0.76 | 76  | 06  | 85                                    | 80                              | 80         | _   | 7            | 5  | 10  | 11.0                 |
| Wheat                      | 0                  | 0.66                           | 0.76 | 96  | 85  | 85                                    | 85                              | 75         | -   | 1            | 5  | 10  | 13.0                 |
| Pulses:                    |                    |                                |      |     |     |                                       |                                 |            |     |              |  |   |                      |
| Beans                      | o                  | 0 66                           | 080  | 86  | 70  | 75                                    |                                 | 0          | -   | 6            | v  | 10  | 14.0                 |
| Broad bean                 | C                  | 0 66                           | 0.86 | 86  | 08  | 75                                    |                                 | . 0        | -   | 6            | · V  | 10  | 14.0                 |
| Chickpea                   | e C                | 0.66                           | 0.86 | 97  | 08  | 5 %                                   |                                 | , <u>2</u> | -   | 1 6          | · •  | 01  | 14.0                 |
| Cowpea                     | o C                | 0.86                           | 0.80 | 97  | 75  | 75                                    |                                 | 5.         |     | 1 C          | ·  | 10  | 13.0                 |
| Dolichos bean              | 0                  | 0.86                           | 0.86 | 86  | 08  | 75                                    | 75                              | 20         | -   | 1 2          | · <b>v</b>   | 10  | 14.0                 |
| Peas                       | 0                  | 0.66                           | 0.86 | 86  | 80  | 75                                    |                                 | 75         | _   | 2            | 5  | 10  | 14.0                 |
| Pigeon pea                 | 0                  | 0.86                           | 0.86 | 86  | 75  | 80                                    |                                 |            |     |              |  | 13  | 13                   |
| Soybean                    | 0                  | 0.66                           | 0.86 | 86  | 70  | 70                                    |                                 | 20         | _   | 7            | 5  | 10  | 12.0                 |
| Velvetbean                 | 0                  | 0.86                           | 97.0 | 86  | 80  | 75                                    | 70                              | 20         | _   | 2            | 5  | 10  | 14.0                 |
| Common vetch               | О                  | 0.86                           | 0 76 | 4   | 80  | 75                                    |                                 | 0/         | -   | 2            | ς.   | 10  | 14.0                 |
| Oil Crops:                 |                    |                                |      |     |     |                                       |                                 |            |     |              |  |   |                      |
| Castor bean                | 0                  | 086                            | 0 86 | 86  | 80  | 75                                    |                                 | 0/         | -   | 2            | 5  | 10  | 10.0                 |
| Groundnut                  | e C                | 0.86                           | 0 26 | 96  | 75  | 75                                    |                                 | 0.2        | . — | 1 ~          | · v  | 10  | 10.0                 |
| linseed                    | 0                  | 0.86                           | 0.86 | 97  | 80  | 75                                    |                                 | 02         | -   | 2            | 5  | 200   | 10.0                 |
| Oilseed rape               | 0                  | 0.86                           | 0.86 | 97  | 85  | 80                                    | 80                              | 75         | 100 | -            | 200  | 250   | 10.0                 |
| Sunflower (H)              | 0                  | 0.66                           |      |     | 80  | 80                                    | ٠                               |            | 5   | v.           | 20   | ,   | 10.0                 |
| Sunflower(OP)              | 0                  | 0.66                           | 0.66 | 26  | 75  | 85                                    |                                 | 75         | 5   | v            | 50   | 100   | 10.0                 |
| Safflower                  |                    | 0.00                           | 2.00 |     |     | 200                                   |                                 | 1          | , , | , ,          |  | 100   | 0.01                 |
|                            | =                  | 286                            | 2    | 96  | 0   | ç                                     |                                 |            | _   | •            | 7  | 201   |                      |

B. Laboratory tests (contd)

Quality requirements for different classes with respect to the analysis figures concerning purity, germination capacity, weed seeds and moisture content.

|                    | Purity<br>(% by weight | ight                           |      |     |     |          |    | Germination Capacity<br>(% by number) |     | Weed seeds, excl<br>(number per kg) | Weed seeds, excluding noxious weeds<br>(number per kg) | noxious we | eds     | Moisture<br>Content<br>(%) |
|--------------------|------------------------|--------------------------------|------|-----|-----|----------|----|---------------------------------------|-----|-------------------------------------|--|------------|---------|----------------------------|
| Species            | A-B                    | C <sub>I</sub> -C <sub>3</sub> | Q    | SOÒ | A-B | -l ű     | Ω  | SOÒ                                   | A   | В                                   | C <sub>1</sub> -C <sub>3</sub>                         | D, QDS     | A-D,QDS |                            |
| Fibre Crops:       |                        |                                |      |     |     |          |    |                                       |     |                                     |  |            |         |                            |
| Cotton (OP)        | 0.66                   | 0.66                           | 0.86 | 26  | 70  | 75       | 70 | 70                                    | 5   | 25                                  | 50   | 50         | 10.0    |                            |
| Cotton (H)         | 0.66                   | 0.66                           |      | ,   | 70  | 75       |    |                                       |     |                                     | 50   |            | 10.0    |                            |
| Flax               | 0.66                   | 0.86                           | 0.86 | 26  | 85  | 8        | 80 | 75                                    | 25  | 25                                  | 100  | 200        | 10.0    |                            |
| Kenaf              | 0.66                   | 0.86                           | 0.86 | 86  | 80  | 75       | 75 | 75                                    | 50  | 100                                 |  |            |         |                            |
| Root Crops:        |                        |                                |      |     |     |          |    |                                       |     |                                     |  |            |         |                            |
| Beets              | 0.66                   | 0.86                           | 0.86 | 26  | 85  | 08       | 80 | 75                                    | 25  | 25                                  | 50   | 100        | 10.0    |                            |
| Swede              | 0.66                   | 0.86                           | 0.86 | 86  | 85  | 08       | 80 | 75                                    | 100 | 100                                 | 200  | 250        | 10.0    |                            |
| Tumip              | 0.66                   | 0.86                           | 0.86 | 86  | 85  | <b>8</b> | 80 | 75                                    | 100 | 100                                 | 200  | 250        | 10.0    |                            |
| Herbage Grasses:   |                        |                                |      |     |     |          |    |                                       |     |                                     |  |            |         |                            |
| Buffel grass       | 75.0                   | 70.0                           | 0.09 | 55  | 70  | 09       | l  | 60 or PLSC 33%                        | 250 | 500                                 | 1000   | 2000       | 10.0    |                            |
| Guinea Grass       | 75.0                   | 70.0                           | 0.09 | 90  | 70  | 9        | 20 | 50 or PLSC 25%                        | 250 | 500                                 | 1000   | 2000       | 10.0    |                            |
| Rhodes grass       | 75.0                   | 70.0                           | 0.09 | 90  | 70  | 9        |    | 50 or PLSC 25%                        | 250 | 200                                 | 1000   | 2000       | 10.0    |                            |
| Rye grass          | 0.86                   | 0.76                           | 0.76 | 96  | 06  | 82       |    | 75                                    | 250 | 200                                 | 750  | 1000       | 10.0    |                            |
| Weeping love grass | 0.06                   | 85.0                           | 0.08 | 80  | 06  | 82       |    | 75                                    | 250 | 200                                 | 1000   | 2000       | 10.0    |                            |
| Setaria grass      | 0.06                   | 85.0                           | 0.08 | 9   | 06  | 82       |    | 08                                    | 250 | 200                                 | 1000   | 2000       | 10.0    |                            |
| Paspalum grass     | 75.0                   | 70.0                           | 0.09 | 09  | 70  | 9        |    | 60 or PLSC 36%                        | 250 | 200                                 | 1000   | 2000       | 10.0    |                            |
|                    | 75.0                   | 70.0                           | 0.09 | 55  | 70  | 9        |    | 60 or PLSC 25%                        |     |                                     |  |            |         |                            |
| Herbage Legumes:   |                        |                                |      |     |     |          |    |                                       |     |                                     |  |            |         |                            |
| Claver             | 0.66                   | 0.86                           | 0.76 | 26  | 80  | 80       | 75 | 70                                    | 100 | 100                                 | 200  | 250        | 10.0    |                            |
| Glycine            | 0.86                   | 97.0                           | 0.76 | 97  | 80  | 75       | 20 | 09                                    | 100 | 100                                 | 200  | 250        | 10.0    |                            |
| Lucerne            | 0.66                   | 0.86                           | 0.86 | 86  | 80  | 8        | 75 | 70                                    | 100 | 100                                 | 200  | 250        | 10.0    |                            |
| Siratro            | 0.66                   | 0.86                           | 0.86 | 26  | 06  | 82       | 80 | 70                                    | 100 | 100                                 | 200  | 250        | 10.0    |                            |
| Stylo              | 0.66                   | 0.86                           | 0.86 | 26  | 75  | 2        | 65 | 09                                    | 100 | 100                                 | 200  | 250        | 10.0    |                            |

|                        | J           | Purity<br>(% by weight)                                    |          | Ger | Germination Capacity<br>(% by number) | pacity<br>er) |     | Meed s | Weed seeds, excluding noxious weeds (number per kg) | ng noxious v<br>per kg)        | weeds  | Moisture Content (%) |
|------------------------|-------------|--|----------|-----|---------------------------------------|---------------|-----|--------|---|--------------------------------|--------|----------------------|
| Species<br>Vegetables: | A-B         | C1-C3  | D        | A-B | C <sub>1</sub> -C <sub>3</sub>        | Q             | QDS | A      | B   | C <sub>1</sub> -C <sub>3</sub> | D, QDS | A-D,QDS              |
| Beets                  | 0 66        | 086  | 0.86     | 85  | 08                                    | 80            |     | 25     | 9   | 75                             | 100    | 10.0                 |
| Cabbage                | 9.66        | 98.0   | 98.0     | 85  | 80                                    | 80            |     | 25     | 25  | 30                             | 100    | 8.0                  |
| Carrot                 | 0.86        | 97.0   | 97.0     | 75  | 75                                    | 70            |     | 200    | 250   | 300                            | 350    | 8.0                  |
| Cauliflower            | 0.66        | 0.86   | 0.86     | 85  | 80                                    | 80            |     | 25     | 25  | 50                             | 100    | 8.0                  |
| Kale                   | 0.66        | 0.86   | 0.86     | 85  | 80                                    | 80            |     | 25     | 20  | 75                             | 100    | 8.0                  |
| Leek                   | 0.66        | 0.66   | 0.86     | 80  | 75                                    | 75            |     | 25     | 25  | 50                             | 100    | 8.0                  |
| Lettuce                | 0.86        | 0.86   | 97.0     | 80  | 75                                    | 75            |     | 50     | 50  | 100                            | 200    | 7.0                  |
| Onion                  | 0.66        | 0.66   | 0.86     | 75  | 70                                    | 70            |     | 25     | 25  | 50                             | 100    | 8.0                  |
| Peas                   | 0.66        | 0.66   | 0.86     | 80  | 75                                    | 75            |     | 1      | 2   | ટ                              | 10     | 14.0                 |
| Pepper                 | 0.66        | 0.86   | 0.86     | 75  | 70                                    | 70            |     | 25     | 25  | 50                             | 100    | 8.0                  |
| Pumpkin                | 0.66        | 0.86   | 0.86     | 80  | 75                                    | 75            |     | 25     | 25  | 50                             | 100    | 8.0                  |
| Rape                   | 0.66        | 0.86   | 0.86     | 85  | 80                                    | 80            |     | 100    | 100   | 200                            | 250    | 7.0                  |
| Sweet corn             | 0.66        | 0.66   | 0.86     | 85  | 80                                    | 80            | 80  | 1      | 2   | 2                              | 10     | 13.5                 |
| Tomato                 | 0.66        | 0.66   | 0.86     | 85  | 85                                    | 80            |     | 1      | 2   | જ                              | 10     | 8.0                  |
| Water melon            | 0.66        | 0.86   | 0.86     | 80  | 75                                    | 75            |     | 25     | 25  | 20                             | 100    | 8.0                  |
| Stimulant Crops:       | rops:       |  |          |     |                                       |               |     |        |   |                                |        |                      |
| Tobacco                | 0.66        | 0.66   | 0.86     | 06  | 85                                    | 82            |     | 50     | 50  | 100                            | 200    | 8.0                  |
| Notes:<br>The followi  | ng seeds an | Notes:<br>The following seeds are evaluated as germinable: | ninable: |     |                                       |               |     |        |   |                                |        |                      |

75% fresh ungerminated seeds of cereals; pulses and herbage legumes. 75% hard seeds of herbage legumes. 50% of hard seeds in pulses. 666

|   |                                     |   | Certification Classes |                                |     |
|---|-------------------------------------|---|-----------------------|--------------------------------|-----|
| Species                                   | A                                   | В   | C                     | C <sub>2</sub> -C <sub>3</sub> | D   |
| Cereals                                   |                                     |   |                       |                                |     |
| Barley                                    | 0.1                                 | 0.1   | 0.3                   | 1.0                            | 2.0 |
| Maize                                     | 0.1                                 | 0.1   | 0.3                   | 1.0                            | 2.0 |
| Rice                                      | 0.5                                 | 0.5   | 1.0                   | 1.5                            | 2.0 |
| Sorghum                                   | 0.1                                 | 0.1   | 0.3                   | 0.5                            | 1.0 |
| Wheat                                     | 0.1                                 | 0.1   | 0.3                   | 1.0                            | 2.0 |
| Pulses:                                   |                                     |   |                       |                                |     |
| Beans                                     | 0.1                                 | 0.1   | 0.0                   | 0.0                            | 10  |
| Broad beans                               | 0.1                                 | 0.1   | 0.2                   | 0.2                            | 1.0 |
| Cowpea                                    | 0.1                                 | 0.1   | 0.2                   | 0.2                            | 1.0 |
| Peas                                      | 0.1                                 | 0.1   | 0.3                   | 1.0                            | 2.0 |
| Soyabean                                  | 0.1                                 | 0.1   | 0.2                   | 0.2                            | 1.0 |
| Oil Crops:                                |                                     |   |                       |                                |     |
| Groundnut                                 | 0.1                                 | 0.1   | 0.2                   | 0.2                            | 1.0 |
| Sunflower                                 | 1.0                                 | 1.0   | 2.0                   | 2.0                            | 3.0 |
|   |                                     |   |                       |                                |     |
|   |                                     |   |                       |                                |     |
| en though the minimum requiremen          | its for certification have been ful | filled the certification of a seed lo   | t shall be            |                                |     |
| used or permitted in a lower class if:    |                                     |   | · •                   |                                |     |
| the seed to a great extent (m<br>insects: | ore than 15%) is mixed with ergo    | the seed to a great extent (more than 15%) is mixed with ergots or infected with seed-borne diseases and insects: | eases and             |                                |     |

Even refuse (a) (b) (c)

insects; because of mould or musty smell the seed cannot be considered to stand storage without loss in germination capacity; After considering the cultivar and the year's crop growth the seed is of unsatisfactory quality with regard to eleming, scarifying or grading.

|                      |            |            | gn cultivars including off-type<br>n permitted percentage by nu |               |
|----------------------|------------|------------|---|---------------|
| Species              | A          | В          | $C_1$   | $C_2$ - $C_3$ |
| Cereals              |            |            |   |               |
| Barley               | 0.1        | 0.1        | 0.3   | 1.0           |
| Maize                | 0.1        | 0.1        | 0.3   | 1.0           |
| Millet, Finger       | 0.3        | 0.4        | 0.8   | 2.0           |
| Millet, Pearl        | 0.3        | 0.3        | 0.6   | 2.0           |
| Oats                 | 0.1        | 0.1        | 0.3   | 1.0           |
| Rice                 | 0.1        | 0.1        | 0.3   | 1.0           |
| Rye                  | 0.3<br>0.3 | 0.3<br>0.4 | 0.6<br>0.8  | 2.0<br>2.0    |
| Sorghum<br>Triticale | 0.3        | 0.4        | 0.8   | 2.0           |
| Wheat                | 0.1        | 0.1        | 0.3   | 1.0           |
| Pulses:              | 0.1        | 0.1        | 0.5   | 1.0           |
|                      | 0.1        | 0.1        | 0.3   | 1.0           |
| Beans<br>Broad bean  | 0.1        | 0.1        | 0.3   | 2.0           |
| Cowpea               | 0.3        | 0.3        | 0.6   | 2.0           |
| Peas                 | 0.1        | 0.1        | 0.3   | 1.0           |
| Soyabean             | 0.1        | 0.1        | 0.3   | 1.0           |
| Common vetch         | 0.1        | 0.1        | 0.3   | 1.0           |
| Oil Crops:           |            |            |   |               |
| Castor bean          | 0.1        | 0.1        | 0.3   | 1.0           |
| Groundnut            | 0.1        | 0.3        | 1.0   | 2.0           |
| Oil seed rape        | 0.3        | 0.3        | 1.0   | 2.0           |
| Sunflower            | 1.5        | 1.5        | 2.5   | 4.5           |
| Fibre Crops:         |            |            |   |               |
| Cotton               | 0.1        | 0.1        | 0.3   | 1.0           |
| Flax                 | 0.1        | 0.1        | 0.3   | 1.0           |
| Kenaf                | 0.1        | 0.1        | 0.3   | 1.0           |
| Root Crops:          |            |            |   |               |
| Beet                 | 0.1        | 0.1        | 0.3   | 1.0           |
| Swede                | 0.3        | 0.3        | 1.0   | 2.0           |
| Turnip               | 0.3        | 0.3        | 1.0   | 2.0           |
| Herbage Grasses:     |            |            |   |               |
| Buffel grass         | 0.3        | 0.3        | 1.0   | 2.0           |
| Guinea grass         | 0.3        | 0.3        | 1.0   | 2.0           |
| Rhodes grass         | 0.3        | 0.3        | 1.0   | 2.0           |
| Rye grass            | 0.3<br>0.3 | 0.3<br>0.3 | 1.0<br>1.0  | 2.0<br>2.0    |
| Weeping lovegrass    | 0.3        | 0.3        | 1.0   | 2.0           |
| Herbage Legumes:     |            |            |   |               |
| Clover               | 0.1        | 0.1        | 0.3   | 1.0           |
| Glycine              | 0.3        | 0.3        | 1.0   | 2.0           |
| Lucerne              | 0.1        | 0.1        | 0.3   | 1.0           |
| Siratro              | 0.3        | 0.3        | 1.0   | 2.0           |
| Stylo                | 0.3        | 0.3        | 1.0   | 2.0           |
| Vegetables:          | 0.4        |            | 0 -   |               |
| Beets                | 0.1        | 0.1        | 0.3   | 1.0           |
| Cabbage<br>Carrot    | 0.3<br>0.2 | 0.3<br>0.2 | 1.0<br>0.4  | 2.0<br>1.5    |
| Cauliflower          | 0.3        | 0.2        | 1.0   | 2.0           |
| Kale                 | 0.3        | 0.3        | 1.0   | 2.0           |
| Leek                 | 0.3        | 0.3        | 1.0   | 2.0           |
| Lettuce              | 0.1        | 0.1        | 0.3   | 1.0           |
| Onion                | 0.3        | 0.3        | 1.0   | 2.0           |
|                      |            |            |   |               |

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|-------------|--------|-----------------|----------|-----------|
| Vegetables: |        |                 |          |           |
| Beets       | 0.1    | 0.1             | 0.3      | 1.0       |
| Cabbage     | 0.3    | 0.3             | 1.0      | 2.0       |
| Carrot      | 0.2    | 0.2             | 0.4      | 1.5       |
| Cauliflower | 0.3    | 0.3             | 1.0      | 2.0       |
| Kale        | 0.3    | 0.3             | 1.0      | 2.0       |
| Leek        | 0.3    | 0.3             | 1.0      | 2.0       |
| Lettuce     | 0.1    | 0.1             | 0.3      | 1.0       |
| Onion       | 0.3    | 0.3             | 1.0      | 2.0       |
| Peas        | 0.1    | 0.1             | 0.3      | 1.0       |
| Pepper      | 0.2    | 0.2             | 0.4      | 1.5       |
| Pumpkin     | 0.1    | 0.1             | 0.3      | 1.0       |
| Rape        | 0.3    | 0.3             | 1.0      | 2.0       |
| Tomato      | 0.1    | 0.1             | 0.3      | 1.0       |
| Sweet corn  | 0.1    | 0.1             | 0.3      | 1.0       |
| Water melon | 0.1    | 0.1             | 0.3      | 1.0       |

NOTES: In view of the frequency of disease infection the S.C.C.I. determines in every special case whether the seed lot can be approved in the respective classes or not.

0.3

1.0

2.0

0.3

Stimulant Crops: Tobacco

2. STANDARDS FOR CERTIFIED SEED - Potato Seeds

Standards for Field Inspection, Virus Post-Control, Tuber Control and Control Growing.

|                            |           | Field Inspection | ction           | Virus Post Control<br>(maximum severe | Tuber control Defect<br>Index (highest value) | Control Growing<br>Defect Index |
|----------------------------|-----------|------------------|-----------------|---------------------------------------|---|---------------------------------|
| Quality<br>class<br>(Code) |           |                  |                 | virus diseases(%)                     |   | (highest value)                 |
|                            | Isolation | Defect Index     | Off-type        |                                       |   |                                 |
|                            | (meters)  | (highest value)  | (piants/100int) |                                       |   |                                 |
| SI(S2,S3)                  | 15        | 1                | Ī               | 0.1                                   | 10  | 3                               |
| SE                         | 10        | 4                | - (             | 0.8                                   | 10  | ~                               |
| El                         | S         | 8                | 7 (             | 1                                     | 10  | 15                              |
| E2                         | S         | 8                | 7 (             | 1                                     | 10  | 15                              |
| А                          | ĸ         | 12               | 5               | •                                     | 15  | •                               |
| ч                          | v         | 4                | 0               |                                       | 7   | ı                               |

NOTES: Field Inspection

- 1. The isolation refers to the distance between the potato crop for certification and potato crops of lower quality classes or volunteer potato plants. Between different cultivars of the same quality class the isolation shall be at least 5 meters.
- 2. Diseased plants, plants of other cultivars and off-type plants shall be recorded as percentage by number; and the percentages found shall be multiplied by the appropriate factors set out in note 3, and the defect index for the particular field.
- 3. The factors to obtain the defect index for a field inspection shall be as follows:

| Factor | 01                            | 8             | 3         | 2                 | 2             | 2        |                   | 1         | _           |         |
|--------|-------------------------------|---------------|-----------|-------------------|---------------|----------|-------------------|-----------|-------------|---------|
| Defect | Potato Leaf roll virus (PLRV) | Severe mosaic | Black leg | Verticillium wilt | Fusarium wilt | Wildings | Cultivar mixtures | Off-types | Mild mosaic | Bolters |

## Tuber control

- 1. Diseased, damaged and severely misshaped tubers and tubers deviating in size from the grade size shall be recorded as percentage by number; and the percentages found shall be multiplied by the appropriate factors as set out in note 2 and the various products so obtained shall be added together to give the defect index for the seed lot.
- The factors to obtain the defect index for the tuber control of a potato seed lot are as follows:

|                           | Defect | Factor |
|---------------------------|--------|--------|
| Pink rot                  | 10     |        |
| Pythium rot               | 10     |        |
| Soft rot                  | 10     |        |
| Spindle tuber             | 10     |        |
| Black leg                 | 3      |        |
| Fusarium                  | 3      |        |
| Phytophtora               | 3      |        |
| Other dry rots            | 3      |        |
| Root knot nematodes       | 3      |        |
| Alternaria                | 1      |        |
| Black heart               | 1      |        |
| Black scurf               | 1      |        |
| Sunscald                  | 1      |        |
| Tuber moth                | 1      |        |
| Cut worms                 | 0.5    |        |
| Other insect damages      | 0.5    |        |
| Heel end necrosis         | 0.5    |        |
| Internal heat necrosis    | 0.5    |        |
| Mechanical damage         | 0.5    |        |
| Powdery scab              | 0.5    |        |
| Spring                    | 0.5    |        |
| Common scab               | 0.25   |        |
| Cracks                    | 0.25   |        |
| Severely misshaped tubers | 0.25   |        |
| Tubers of deviating size  | 0.25   |        |
|                           |        |        |

- 3. For the purposes of an examination the following shall be ignored:
  - (i) attacks by Black scurf, Common scab, and Powdery scab if the area covered is less than 10 percent of the total tuber;
  - (ii) mechanical damages, cut worms damages, other insect damages and cracks if the area covered is less than 10 percent of the total tuber area or if the penetrating depth is less than 10 percent of the tuber;
  - (iii) internal heat necrosis and Spraing covering less than 10 percent of the cut surface;
  - (iv) diffuse brown spotting; and
  - (v) size deviating of less than 5 percent of the total tubers.
  - 4. If in the case of defects with a factor of 10 or 3, the product of the percentage of defective tubers and the appropriate factor exceeds 5, the seed lot shall be rejected.

### General note

- For Wart Disease (Synchytrium endobioticum); Bacterial Wilt; Brown Rot; Ring Rot (Pseudomonas solacearum and Corynebacterium sepedonicum) and Potato Cyst Nematode (Globodera sp.) the tolerance is nil at FIELD INSPECTION, TUBER CONTROL and CONTROL GROWING for all classes.
- If a potato seed lot does not reach the standards for the class it has been grown; it may be approved in a lower class, or rejected for certification if found to be of a lower standard than that prescribed for Certified Seed 4<sup>th</sup> generation.

# (D) SEED CERTIFICATION STANDARDS FOR DISEASES

| CROP   | BASIC SEED              | CERTIFIED 1ST           |
|--|-------------------------|-------------------------|
| Groundnut, Arachis hypogaea L.                           |                         |                         |
| Ralstonia solanacearum                                   | 0 (at final inspection) | 0 (at final inspection) |
| Groundnut Rosette virus                                  | 0.5                     | 0.5                     |
| Early leaf spot (Mycosphaerella arachidis)               | 0.5                     | 0.5                     |
| Late leaf spot   | 0.5                     | 0.5                     |
| Soybean, Glycine max L. Merrill                          |                         |                         |
| Soybean mosaic virus SMV %                               | 0                       | 0.02                    |
| Cercospora kikuchii Purple stain %                       | 2.5                     | 2.5                     |
| Xanthomonas axonopodis Bacterial pustule                 | 0                       | 0                       |
| Pseudomonas savastanoi                                   | 0                       |                         |
|  |                         |                         |
| Cotton Hybrid, Gossypium hirsutum L.                     | 0                       | 0                       |
| Bacterial blight   | 0                       | 0                       |
| Alternaria alternate  Leaf curl virus                    | 0                       | 0                       |
|  | 0                       |                         |
| Sunflower OPV, Helianthus annuus L.                      |                         |                         |
| Sclerotinia sclerotiorum Color rot (At final inspection) | 0                       | 0                       |
| Verticillium dahliae Verticillium wilt                   | 0                       | 0                       |
| Plasmopara halstedii Downy mildew %                      | 0                       | 0.2                     |
| Alternaria helianthi Leaf blight of sunflower (%)        | 0                       | 0.2                     |
| Botryotinia fuckeliana Grey mould of sunflower (%)       | 0.5                     | 1                       |
| Sunflower Hybrid, Helianthus annuus L.                   |                         |                         |
| Sclerotinia sclerotiorum Color rot (At final inspection) | 0                       | 0                       |
| Verticillium dahliae Verticillium wilt                   | 0                       | 0                       |
| Plasmopara halstedii Downy mildew (%)                    | 0                       | 0.2                     |
| Alternaria helianthi Leaf blight of sunflower (%)        | 0                       | 0.2                     |
| Botryotinia fuckeliana Grey mould of sunflower (%)       | 0.5                     | 1                       |

| Sunflower yellow ringspot virus               | 0.5 | 0.5 |  |
|---|-----|-----|--|
| Rice, Oryza sativa L. (hybrid)                |     | T   |  |
| Magnaporthe grisea Rice blast (piricularia) % | 0.1 | 0.5 |  |
| Aphelenchoides besseyiWhite tip nematode      | 0   | 0   |  |

| Rice, Oryza sativa L. (varieties)                   |      |      |
|---|------|------|
| Magnaporthe grisea Rice blast (piricularia)%        | 0.1  | 0.5  |
| Aphelenchoides besseyiWhite tip nematode            | 0    | 0    |
| Pearl Millet, Pennisetum glaucum L.                 |      |      |
| Downy mildew  | 0.5  | 0.5  |
| Smut  | 0    | 0    |
| Ergot   | 0    | 0    |
| Rust  | 0    | 0    |
| Beans, Phaseolus vulgaris L.                        |      | _    |
| Bean common mosaic virus %                          | 0    | 0.1  |
| Bean necrotic mosaic virus                          | 0    | 0.1  |
| Collectotrichum lindeuthianum Anthracnose of bean % | 0.02 | 0.02 |
| Pseudomonas phaseolicola Halo blight %              | 0    | 0.05 |
| Pseudomonas syringae pv.syringae Bacterial canker   | 0    | 0.05 |
| Phaeoisariopsisgriseola                             | 0.02 | 0.05 |
| Xanthomonas phaseoli Bacterial blight of bean       | 0    | 0.05 |
| Angular bean leaf spot                              | 2.0  | 2.0  |
| Rust  | 0.5  | 0.5  |

| Sorghum OPV, Sorghum bicolor L. Moench        |     |     |
|---|-----|-----|
| Sporisorium sorghi<br>Covered kernel smut (%) | 0.1 | 0.2 |
| Peronosclerospora sorghiMildew (%)            | 0.1 | 0.2 |
| Ergot (Claviceps Africana)                    | 0.1 | 0.1 |

| Sorghum hybrid, Sorghum bicolor L. Moench                |     |     |
|--|-----|-----|
| Sporisorium sorghi covered kernel smut (%)               | 0.1 | 0.2 |
| Peronosclerospora sorghiMildew (%)                       | 0.1 | 0.2 |
| Ergot (Claviceps Africana)                               | 0.1 | 0.1 |
| Wheat, Triticum aestivum L. emend                        | 1   |     |
| Tilletia barclayana Kernel bunt                          | 0   | 0   |
| Ustilago nuda (Loose smut)                               | 0   | 0   |
| Stem rust  | 0.5 | 0.5 |
| Leaf rust  | 0.5 | 0.5 |
| Leaf blotch  | 0.5 | 0.5 |
| Wheat streak mosaic virus                                | 0   | 0   |
| Wheat spindle streak mosaic virus                        | 0   | 0   |
| Barley strip mosaic virus                                | 0   | 0   |
| Wheat dwarf virus  | 0   | 0   |
| Maize OPV, Zea mays L.                                   |     |     |
| Sphacelotheca reilianaHead smut (at final inspection)    | 0   | 0   |
| Ustilago zeaeCommon smut (at final inspection)           | 0   | 0   |
| Sporisorium cruentum<br>Loose smut (at final inspection) | 0   | 0   |
| Maize lethal necrosis disease                            | 0   | 0   |
| Maize Hybrid, Zea mays L.                                |     |     |
| Sphacelotheca reilianaHead smut (at final inspection)    | 0   | 0   |
| Ustilago zeaeCommon smut (at final inspection)           | 0   | 0   |
| Sporisorium cruentum Loose smut (at final inspection)    | 0   | 0   |
| Gray leaf spot   | 0.5 | 0.5 |
| Maize lethal necrosis disease                            | 0   | 0   |

# SIXTH SCHEDULE

# A. COMPOSITION OF THE VARIETY RELEASE COMMITTEE MEMBERS (Regulation 36)

| No.      | INSTITUTION  | DESIGNATION                          | STATUS           |
|----------|--|--------------------------------------|------------------|
| 1        | Seed Control and Certification Institute                                       | Controller of Seed                   | Member           |
| 2        | Seed Control and Certification Institute                                       | Seed Specialist                      | Member           |
| 3        | Zambia Agriculture Research Institute  | Plant Pathologist Specialist         | Member           |
| 4        | Zambia National Farmers Union  | Representative                       | Member           |
| 5        | National Association for Peasant and Small<br>Scale Farmers of Zambia          | Representative                       | Member           |
| 6        | University of Zambia, School of Agricultural Sciences, Crop Science Department | Private Plant Breeder                | Member           |
| 7        | Zambia Agriculture Research Institute  | Government Plant Breeder             | Member           |
| 8        | Zambia Agriculture Research Institute  | Farming Systems Specialist           | Member           |
| 9        | Zambia Seed Trade Association  | Representative                       | Member           |
| 10<br>11 | Zambia National Farmers Union<br>Department of Agriculture                     | Farmer<br>Crops Extension Specialist | Member<br>Member |
| 12       | Seed Control and Certification Institute                                       | Secretariat                          | Member           |

# B. LISTS FOR THE PROVISION OF PRE-RELEASED VARIETIES

(Regulation 41)

Tabulated below are the details on the maximum quantities of seed that can be allowed for importation when the variety is pre-released.

| CROPS                    | QUANTITIES |
|--------------------------|------------|
| Maize                    | 10.0 tons  |
| Wheat                    | 1.0 tons   |
| Sorghum                  | 500 kg     |
| Millets                  | 100 kg     |
| Rice                     | 600 kg     |
| Barley                   | 1.0 tons   |
| Soybeans                 | 5.0 tons   |
| Cowpeas                  | 500 kg     |
| Beans                    | 1.0 tons   |
| Cotton                   | 500 kg     |
| Sunflower                | 100 kg     |
| Herbage                  | 140 kg     |
| Tobacco                  | 80 grams   |
| Potato (tubers)          | 30 tons    |
| Potato (TPS)             | 1 kg       |
| Groundnuts               | 5.0 tons   |
| Vegetables: larger seeds | 200 kg     |
| Vegetables: small seeds  | 100 kg     |
| Green manure             | 150 kg     |
| Pigeon Pea               | 350 kg     |

## Note: For crops NOT LISTED, the quantity will be determined by Institute

## ii. Minimum Quantity of seed to be submitted for Trials

## (Regulation 42)

| NO. | CROP  | DUS TESTING | VARIETY TESTING |
|-----|---|-------------|-----------------|
| 1   | Maize   | 1.0kg       | 4kg             |
| 2   | Wheat, Sorghum, Millet, Rice, Barley and other small grains | 1.0kg       | 2kg             |
| 3   | Soya beans, Cowpea and other food legumes,                  | 1.0kg       | 2kg             |
|     | Beans   | 1.0kg       | 4kg             |
| 4   | Cotton, sunflower   | 1.0kg       | 2kg             |
| 5   | Herbage legumes, Grasses                                    | 0.5kg       | 1kg             |
| 6   | Tobacco   | 0.2g        | 1.5g            |
| 7   | Vegetables  | 5.0kg       | 10g             |
| 8   | Potato and other tubers                                     | 25kg        | 75kg            |
| 9   | Groundnut   | 1.0kg       | 4kg             |

Seed should be submitted by 31st March for irrigated crops and  $30^{\text{th}}$  September for rain-fed crops.

# $\begin{array}{c} \textbf{SEVENTH SCHEDULE} \\ \textbf{(Regulation 48)} \end{array}$

# PRESCRIBED FEES

## A. Licences

Registration as Seed Grower per HA:Fee unitsPotato250 per hectareHybrid crops200 per hectareOther crops150 per hectareQuality declared seed100 per hectare basisLate registration25% more on original fee

## B. LICENCES

## Seed Seller

| <ul><li>(a) Wholesale and Retail</li><li>(b) Wholesale</li><li>(c) Retail</li></ul> | 600 per annum<br>550 per annum<br>300 per annum |
|---|---|
| -Seed Inspector's Licence   | 400 per annum                                   |
| -Seed Analyst's Licence   | 400 per annum                                   |
| -Seed Sampler's Licence   | 400 per annum                                   |
| -Seed Testing Lab. Licence  | 1000 per annum                                  |
| -Seed Processing Licence  | 700 per annum                                   |

| C. Testing of   | seeds     | 10,000 (1,000) |                                 |                     |
|-----------------|-----------|----------------|---------------------------------|---------------------|
|                 | Purity    | Germination    | Weed determination by<br>Number | Moisture<br>Content |
| Species         | Fee units | Fee units      | Fee units                       | Fee units           |
| Cereals         | 100       | 100            | 100                             | 100                 |
| Pulses          | 100       | 100            | 100                             | 100                 |
| Oil crops       | 100       | 100            | 100                             | 100                 |
| Fibre crops     | 100       | 100            | 100                             | 100                 |
| Cottonfuzzy     | 100       | 100            | 100                             | 100                 |
| Cotton acid     | 100       | 100            | 100                             | 100                 |
| Herbage grasses | 100       | 100            | 100                             | 100                 |
| Herbage Legumes | 100       | 100            | 100                             | 100                 |
| Vegetables      | 100       | 100            | 100                             | 100                 |
| Stimulant crops | 100       | 100            | 100                             | 100                 |
| Tobacco         | 200       | 200            | 200                             | 200                 |
| Others          | 100       | 100            | 100                             | 100                 |
| Flowers         | 100       | 100            | 100                             | 100                 |

## D. VARIETY TESTING AND REGISTRATION

|  | US Dollar                            |
|--|--------------------------------------|
| Application for pre-release                    | 20.00/application                    |
| Application for release                        | 20.00 per application                |
| Distinctness, Uniformity and Stability testing | 150.00 per variety per year          |
| National variety release trials                | 150.00 per variety per site per year |
| Control growing                                | 50.00 per seed lot per site          |
| Purchase of VCU Report                         | 50.00 per variety                    |
| Purchase of DUS Report                         | 50.00 per variety                    |

## E. MISCELLANEOUS TESTS

| Description   | Fee units  |
|---|--|
| Seed Health Test  |  |
| - Mycological - Bacteriological   | 200<br>200<br>200                                    |
| - Virological - Verification of cultivars Tuber control                                       | 200<br>150<br>200 per plot                           |
| TZ Test Weight per 1000 seeds ( per test)   | 200<br>150   |
| Defect test<br>Grading  | 150<br>150   |
| Tobacco Blowing   | 200 per Kg of uncleaned<br>material to be determined |
| Other  F. CERTIFICATES  | 83   |
| ISTA-Orange International Seedlot Certificate ISTA-Blue International Seed Sample Certificate | •  |
| Notice to Import Seeds - Vegetables - other crops   | 250 per seedlot<br>250 per seedlot                   |

# G. TRAINING COSTS

|   | Foreign National<br>US \$ per day | Zambian<br>US\$ per day |
|---|-----------------------------------|-------------------------|
| G1. Attachment to:                        |                                   |                         |
| Official Seed Testing Station (OSTS)      | 50                                | 20                      |
| Official Seed Inspectorate Service (OSIS) | 50                                | 20                      |
| Seed Research and Development Unit (SRDU) | 50                                | 20                      |

| Statutory Instruments | 29th March, 2018 |
|-----------------------|------------------|
|-----------------------|------------------|

## G2. Training material

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 $\begin{array}{ccc} Books & 55.00/copy \\ Booklets & 10.00/copy & 5.00/copy \\ \end{array}$  Other bound lecture material  $\begin{array}{ccc} 55.00/copy & 5.00/copy \\ \end{array}$ 

H. **Appeal** 18,000 Fee Units

## Notes

- 1. The charges for ISTA Certificates are in addition to the fees for seed testing.
- 2. Double the normal fees shall be charged for the tests required to be done immediately and not in the normal sequence.
- 3. Fees for seed testing are charged per test.
- 4. Training costs do not include cost of training materials, board and lodging.

M. Katambo,
Minister of Agriculture

Lusaka 22nd March, 2018 [MAL.64/9/4]