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THE SEEDS (REGULATION OF STANDARDS) ACT, 1973

(No. 29 OF 1973)

REGULATIONS

Made under section 5

THE SEEDS REGULATIONS, 1976

1. These Regulations may be cited as the Seeds Regulations, 1976. Title

2.—(1) In these Regulations, unless the context otherwise requires— Interpretation

"the Act" means the Seeds (Regulation of Standards) Act, 1973;

"breeders grade" with respect to seed, means—

(a) seed recognized by the Director of Crop Development of the Ministry of Agriculture being seed of a variety that has been produced by the plant breeder responsible for the breeding and maintenance of that variety under conditions which have ensured that the specific characteristics of the variety have been maintained and which provides the source for the initial and recurrent increases of seed of the pedigree grades; or

(b) if of foreign origin, that the seed is certified by a recognized certification agency as being of breeders grade;

"certified grade" with respect to seed, means—

(a) the approved progeny of breeder, foundation, registered or certified seed managed to maintain satisfactory genetic identity and purity the production of which is supervised and approved by the Tanzania Official Certification Agency and which provides the source for the initial and recurring increase of seeds; or

(b) if of foreign origin, that the seed is certified by a recognized certification agency or by the Chief Certification Officer as being of certified grade;

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"Chief Analyst" means the person appointed or designated by the Minister as the Chief Analyst under section 7 of the Act;

"Chief Certification Officer" means the person for the time being in charge of the Tanzania Official Certification Agency;

'Chief Inspector" means the person appointed or designated by the Minister as the Chief Inspector under section 7 of the Act;

"common grade" with respect to seed, means—

(a) seed of any kind specified in the First Schedule hereto that has no pedigree status; or

(b) if of foreign origin, that the seed is certified by a recognized certification agency or by the Chief Certification Officer or by the Chief Inspector as being of common grade;

"foundation grade" with respect to seed, means—

(a) the approved progeny of breeder seed produced by seed growers authorized by the Tanzania Official Certification Agency for the production of this grade and which has been so managed as to maintain genetic purity and identity which provides a source for the initial and recurring increase of seeds; or

(b) if of foreign origin, that the seed is certified by a recognized certification agency or by the Chief Certification Officer as being of foundation grade;

"inert matter" includes all seed-like structures from both crop and weed plants and other matter that is not seed;

"inter-agency label" means a label issued by the Chief Certification Officer in respect of seed certified by a recognized certification agency;

"lot designation" means a number, mark, symbol or laboratory test number identifying a seed lot;

"Minister" means the Minister for the time being responsible for agriculture;

"official sample" means a sample of seed drawn by an inspector in the prescribed manner;

"recognized certification agency" means a foreign seed certification agency recognized by the Tanzania Official Certification Agency for the purposes of these Regulations;

"registered grade" with respect to seed, means—

(a) the approved progeny of breeder, foundation or registered seed produced by seed growers authorized by the Tanzania Official Certification Agency for the production of this grade and which has been so managed as to maintain genetic purity and identity which provides a source for the initial and recurring increase of seeds; or

(b) if of foreign origin, that the seed is certified by a recognized certification agency or by the Chief Certification Officer as being of registered grade;

"seed lot" means a quantity of seed up to a maximum of 20,000 kilograms for seeds the size of Triticum spp. or larger, including paddy (*Oryza sativa*) and 10,000 kilograms for seeds smaller than Triticum spp.;

"speciality seed" means seed of a kind or of a mixture of the kinds, specified in the First Schedule hereto and mixed or attached to any fertilizer, soil, compost, peat, moss, mica, plastic, paper, cellulose or any other matter and the seed itself meets the appropriate grade as defined in the First Schedule;

"sub-standard seed" means seed certified by the Chief Certification Officer as sub-standard seed in accordance with the following conditions—

(a) the seed forms part of a seed lot which does not meet the normal certification standards other than those affecting the genetic purity or the reputation of certified seed;

(b) the seed is, in the opinion of the Chief Certification Officer, desirable in case of emergency for the advancement of crop improvement;

(c) the certificate or labels relating to the seed clearly show the respect in which the seed does not meet the normal certification standards;

(d) the cerficate or lables relating to the seed shall be stamped or marked "Sub-Standard" with a stamp or other device bearing the emblem of the Tanzania Official Certification Agency; and

(e) notwithstanding the foregoing, the seed shall be regarded as regraded seed of the grade which it represents, that is to say, foundation, registered or certified grade, as the case may be:

Provided that every invoice relating to the sale of sub-standard seed shall bear a stamp, mark or statement indicating clearly that the seed described thereon is sub-standard;

"Tanzania pedigree grade" means a grade that contains one of the words "breeders," "foundation," "registered" or "certified" as part of the grade name;

"undesirable seed" means seed that are light, undersized, off-colour, shrunken, immature, damaged, diseased, injured, sprouted or frosted, and include—

(a) in the case of oats, double seeds;

(b) in the case of barley, seeds with excess awns;

(c) in the case of flax, scaly or papery seeds;

(d) in the case of alfafa or clover, off-colour seeds;

(e) in the case of sweet clover, seeds covered by hulls;

(f) in the case of chaffy grasses, unbroken spikelets.

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(2) For the purposes of these Regulations references to "pure seed" shall include references to all seeds of each kind and variety or of each kind under consideration present in excess of five *per centum* of the whole seed lot:

Provided that in certain circumstances kinds and varieties or kinds present to the extent of five *per centum* or less of the whole seed lot may be considered pure seed, as for example, kinds and varieties or kinds shown on a label as components of a mixture in quantities of five *per centum* or less.

Exemption

3. Seed for experimental purposes, including breeding, imported or produced by persons or organizations approved in that behalf by the Chief Certification Officer shall be exempt from the operation of the provisions of the Act and of these Regulations.

Standards: First Schedule

4. The grades, the grade names and the standards for the kinds of seed specified in the tables of grade standards set out in the First Schedule hereto shall respectively be those described in respect of each kind of seed in the appropriate table of grade standards.

Additional requirements as respects standards

5.—(1) In addition to the standards prescribed by regulation 4, the requirement prescribed by paragraph (2) and (3) of this regulation shall apply with respect to the standards of the appropriate kind of seed specified in the tables of grade standards set out in the First Schedule hereto.

(2) For every kind of seed—

(a) the seed shall not contain any prohibited noxious weed seeds;

(b) if graded with the name of Tanzania pedigree grade, the seed shall not be mixed with any other seed;

(c) each seed lot sold as Foundation seed, Registered seed or Certified seed—

(i) shall be uniform and sound;

(ii) shall not be heat-damaged or be musty or contain moisture in excess of 13% or such greater percentage as the Chief Certification Officer may, from time to time, prescribe for seed of a specified kind;

(iii) shall be free from undesirable seeds and inert matter within the percentage allowed under these Regulations; and

(iv) shall not be discoloured by weathering, staining or other factors to an extent that will impair its appearance or utility.

(3) Whenever seed is sold or offered for sale, that seed shall be subjected to a test or tests to determine the percentage of germination required to be shown on the label thereof and the sale shall take place within seven months (not including the month shown on the label) from the date on which the last test was performed. The Chief Certification Officer may from time to time prescribe longer or shorter periods for re-testing.

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Restrictions as to use of variety names

6.—(1) No person shall mark or label a package of seed with a variety name unless that seed is of the variety to which the variety name refers.

(2) No person shall modify a variety name of any kind of seed for any purpose whatsoever.

(3) No person shall label a package of a mixture of seed, other than a mixture of lawn or turf grass seed, containing seed of the kinds specified in Tables 7, 8 and 9 of the First Schedule hereto, with a variety name unless—

(a) he is authorized in that behalf by the Chief Inspector; and

(b) all of the seed of the kind to which the variety name refers is—

(i) one of the Tanzania pedigree grades; or

(ii) in the case of a mixture made in the establishment of a person authorized to apply official labels or inter-agency certification label pusuant to paragraph (1) of regulation 19, of pedigree grade.

Marking and labelling

7.—(1) The information required by these Regulations on the label or outside of a package of seed shall be shown conspicuously, legibly and indelibly in Swahili or English or in both English and Swahili, and shall appear on one exposed face of the package or label and shall be of a size and colour that can be easily read.

(2) No label shall contain any incorrect or misleading information, mark or brand name that might be construed as a variety name.

(3) For the purposes of these Regulations, the Tanzania Seed Seal and the label colours described under this paragraph shall be used as follows—

(a) the Tanzania Seed Seal shall be applied on all labels relating to seed of Foundation, Registered or Certified grade;

(b) in the case of a label on a package containing Foundation seed, *white* colour shall be used, with the word "Foundation" conspicuously applied across one side of the label; the other side of the label shall be *white*;

(c) in the case of a label on a package containing Registered seed, *purple* colour shall be used, with the word "Registered" conspicuously applied across one side of the label; the other side of the label shall be *purple*;

(d) in the case of a label on a package containing Certified seed, *blue* colour shall be used, with the word "Certified" conspicuously applied across one side of the label; the other side of the label shall be *blue*;

(e) in the case of a label on a package containing common seed, the label shall be *brown*.

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(4) The Tanzania Seed Seal referred to in paragraph (3) of this regulation shall have printed thereon the words "Tanzania Certified Seed" and shall be of such material, shape, size and colour as the Minister may approve.

General labelling requirements

8.—(1) Every package of seed marked with a grade name shall have on its label a statement as to the percentage of germination and date on which the germination test was completed.

(2) Every package of seed shall have a label with the weed seed content thereof (in percentage or number of seeds per kilogram, as the case may require).

(3) Every package of seed weighing more than 2,000 grams shall have a label with the lot designation of that seed.

(4) Whenever seed is treated with a poisonous material it shall be thoroughly stained with a conspicuous contrasting colour to show that the seed has been so treated.

(5) When seed has been treated with a poisonous material, the container of the seed shall be marked or have attached thereto a conspicuous label reading as follows:—(Name of poisonous material, (substance) in bold letters in Swahili and English:)

"*POISONOUS:* do not use as food, feed or oil. This has been treated with .....
.....".

(6) Seed for sale shall be packed in packages unless—

(a) it is of a grade other than one of the Tanzania pedigree grades and is accompanied by a shipping label or invoice setting out the information required to be stated on the label of a package of that seed; or

(b) it is delivered in bulk in a bulk container that is labelled in accordance with these Regulations; or

(c) (i) it is wheat, oats, barley, rye, flax, maize, sorghum, millet, rice or any other prescribed kind of seed, going to a grain terminal or market for food, feed or oil;

(ii) it is of one of the Tanzania pedigree grades and is accompanied by a statement setting out the quantity of seed, the name and address of the purchaser and the information required to be stated on the label of that seed, two copies of which shall have been forwarded to an officer of the Tanzania Official Certification Agency having jurisdiction within the area in which the seed is sold; and

(iii) it is sold for seeding purposes by a person who is authorized to apply official labels or inter-agency certification labels pursuant to regulation 19.

(7) Seed labels shall be in the form appearing under this paragraph and shall contain the information provided for in that form.

SEED ANALYSIS LABEL

Kind of Seed:	Variety:	Grade	Lot No:	Weight
Purity:	% Weed Seed	% Insert % Matter:	Other crop % Seeds:	
Germination:	% Hard Seed:	% Total Germ:	% *Date Tested:* Day Mon.	Year

Restricted Noxious weed seed:
Name and Number per kilogram:
Where grown:
For Maize and Tree and Shrub Seeds:
Grown at height above sea level:

Seed colour	Cross:	Single Cross: Double Cross:
Recommended for:	Altitude in metres	Triple Cross: Open Pollinated:
Moisture % Labelled by:		Composite: Address:

Application of labelling requirements in respect of field crops, and exemptions

9.—(1) Subject to the provisions of paragraph (2) of this regulation, the labelling requirements prescribed under regulations, 10, 11, 12, 13, 14 and 15 shall apply to all the kinds of seed specified in those regulations.

(2) Nothing in regulation 10, 11, 12, 13, 14 or 15 shall apply to seeds sold by a wholesaler to a sub-wholesaler for resale and re-labelling if the information required under any of those regulations is shown on the invoice accompanying the sale or on a label.

Labelling of seeds specified in Tables 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12 13, 14, 15, 18 and 19 of the First Schedule

10.—(1) Every package of seed, offered for sale, of the kinds specified in Tables 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 18 and 19 of the First Schedule hereto, other than seed that is sweet corn (or sweet maize) or garden beans shall be labelled with the following information—

(a) the name and address of the seller;

(b) the name of the kind of the seed;

(c) the name of the variety of the seed;

(d) the name of the grade of the seed;

(e) the day, month and year of germination test;

(f) in the case of seed that is imported, the name of the country of production;

(g) in the case of seed that is a blend of two or more varieties, the name of each of the component varieties.

(2) For the purpose of paragraph (1) of this regulation the following are hereby prescribed as the kinds of seed:—

(a) "open pollinated", being any seed formed by means other than controlled and selective breeding;

(b) "varietal cross", being seed of the first generation of a cross between two named open pollinated varieties, or an open pollinated variety and a hybrid;

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(c) "top cross", being seed of the first generation of a controlled cross between a named open pollinated variety and an inbred line;

(d) "hybrid", being seed of the first generation of a cross between two or more inbred lines or their combination including single crosses, double crosses and three-way crosses;

(e) "composite variety", being seed derived from selected strains which have been allowed to freely inter-pollinate;

(f) "inbred line", being seed derived from a relatively homogeneous line produced by inbreeding and selection;

(g) "synthetic variety", is seed formed through a combination of several intercrosses of genotypes which have been previously tested for their combining ability;

(h) "single cross hybrid", is seed obtained by crossing two unrelated homozygous strains to obtain uniform and enhanced trait expression in the first generation;

(i) "a three way cross hybrid", is seed obtained by crossing three unrelated homozygous strains to obtain uniform and enhanced trait expression in the first generation heterozygote;

(j) "a double cross hybrid," is seed obtained by crossing four unrelated homozygous strains or two unrelated single cross hybrids to obtain uniform and enhanced trait expression in the first generation heterozygote.

Labelling mixtures of seeds

11. Every package of a mixture of seeds, offered for sale, of the kinds specified in the First Schedule hereto shall be labelled with the following information—

(a) the name and address of the seller;

(b) the name of the grade of the seed;

(c) the name and percentage by weight of each kind in the mixture, in order of its predominance;

(d) the name of the variety of each kind in the mixture.

Labelling roots and vegetable seed

12. Every package of seed, offered for sale, of the kinds specified in the First Schedule hereto and of seed that is sweet maize, garden peas and garden beans shall be labelled with the following information—

(a) the name and address of the saller;

(b) the name of the kind of the seed, roots or cuttings, as the case may be;

(c) the name of the variety of the seed, roots or cuttings, as the case may be;

(d) if sold or offered for sale on the basis of grade, the name of the grade of the seed, roots or cuttings, as the case may be;

(e) if not sold or offered for sale on the basis of a grade of the seed, root or cutting—

(i) the date on which the seed, root or cutting was tested for germination; and

(ii) if the percentage of germination is below the minimum prescribed for the lowest grade, the percentage of germination of that kind of seed, root or cutting.

Labelling onion sets and multiplier onions

13. Every package of onion sets and multiplier onions offered for sale shall be labelled with the following information—

(a) the name and address of the seller;

(b) the term "onion sets" or "multiplier onions", as the case may be;

(c) the name of the grade of the onion sets and multiplier onions as set out in Table 17 of the First Schedule hereto.

Labelling forage crop seed

14. Every package of seed, offered for sale, of a kind specified in Tables 8 and 9 of the First Schedule hereto shall be labelled with the following information—

(a) the name and address of the seller;

(b) the name of the kind of the seed;

(c) the name of the grade of the seed;

(d) the name of the variety of the seed;

(e) the name of the country of production;

(f) in the case of seed that is sweet clover seed or a mixture containing 5% or more sweet clover seed, the words "white blossom" or "yellow blossom" to indicate the kind of sweet clover, or "mixed white and yellow blossom.".

Labelling mixtures of seeds specified in Tables 8 and 9 of First Schedule

15.—(1) Every package of a mixture of forage seeds offered for sale, of the kinds specified in Tables 8 and 9 of the First Schedule hereto shall be labelled with the following information—

(a) the name and address of the seller;

(b) the name of the grade of the seed;

(c) the name and percentage of each kind of seed which singly constitutes 5% or more, or in the case of sweet clover 1% or more, by weight of the mixture;

(d) the percentage of weight of the kinds of seed of the mixture not stated on the label pursuant to sub-paragraph (c) of this paragraph preceded by the words "other crops":

Provided that the name and percentage of each kind of seed in a package that singly constitutes 1% or more by weight of the mixture, may be marked on the package.

(2) The information stated on a package or label pursuant to sub-paragraphs (b), (c) and (d) of paragraph (1) of this regulation shall be on the same face of the package or label and shall be of the same type of printing or lettering.

Official lables

16.—(1) Every package of seed produced in Tanganyika and graded with the name of one of the Tanzania pedigree grades shall be labelled with an official label authorized by the Chief Certification Officer.

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(2) The official label referred to in paragraph (1) of this regulation shall contain the following information—

(a) the name of the kind of the seed;

(b) the name of the variety of the seed;

(c) the name of the grade of the seed;

(d) the crop certificate number;

(e) the serial number of the label;

(f) the seed certificate number;

(g) the lot designation of the seed.

(3) The labels referred to in paragraph (1) of this regulation shall be supplied only to those persons applying for these labels and furnishing an inspector with—

(a) a declaration of the grower declaring that the seed to which the labels are to be applied is derived from the crop in respect of which the crop registration certificate or crop certificate specified in the declaration applies; and

(b) a declaration of the applicant, if the applicant is not the grower, declaring that the seed referred to in the grower's declaration is the seed to which the labels are to be applied and that the seed has not become mixed or contaminated while in the possession of the applicant.

Inter-agency labels

17.—(1) Every package of seed of foreign origin graded with the name of the Tanzania pedigree grades shall be labelled with an inter-agency certification label authorized by the Chief Certification Officer.

(2) The inter-agency certification label referred to in paragraph (1) of this regulation shall contain the following information—

(a) the name of the kind of the seed;

(b) the name of the variety of the seed;

(c) the name of the grade of the seed;

(d) the name of the country of production;

(e) the serial number of the label;

(f) the seed certificate number;

(g) the lot designation of the seed.

(3) Inter-agency certification labels referred to in paragraph (1) of this regulation shall be supplied only if the person applying for these labels furnishes an inspector with—

(a) evidence satisfactory to the inspector that the imported seed is in containers bearing labels of a foreign certification agency acceptable to the Chief Certification Officer;

(b) a declaration of the applicant declaring that the seed has not become mixed or contaminated while in the possession of the applicant; and

(c) full particulars of the information on the labels of the foreign certification agency.

General provisions with respect to official and inter-agency labels

18.—(1) An official label or inter-agency certification label shall only be applied to containers for which the labels were issued.

(2) Except where the Chief Certification Officer otherwise directs, an official label or inter-agency certification label shall not contain anything other than the information required by regulation 16 or 17.

(3) An official label or inter-agency certification label shall be applied to a container of seed only by an inspector, or in the case of seed of one of the Tanzania pedigree grades, by or under the direction of a person authorized to do so pursuant to regulation 19.

Chief Certification Officer may uthority use of official labels or inter-agency certification labels in certain circumstances

19.—(1) The Chief Certification Officer may authorize any person to apply official labels or inter-agency certification labels to seed of one of the Tanzania pedigree grades, if that person—

(a) has seed processing equipment and facilities adequate for the proper processing of seeds;

(b) has adequate facilities to maintain the identity of different seed lots; and

(c) will return to the Chief Certification Officer on request by him any labels supplied pursuant to regulation 16 or 17.

(2) Where the Chief Certification Officer or an inspector authorized by him is of the opinion that the person authorized to apply official labels or inter-agency certification labels pursuant to paragraph (1) of this regulation is—

(a) not operating his establishment in such a manner as to assure the proper processing of seed; or

(b) not complying with the provisions of regulation 16, 17, 18 or of this regulation,

the Chief Certification Officer may withdraw the authority granted pursuant to paragraph (1) of this regulation.

Seed crop inspection

20.—(1) Crop inspection of seed-field shall be confined to crops for the production of seed (of the Tanzania pedigree grades) approved by the Chief Certification Officer for inspection.

(2) Every application for a crop inspection of a seed-field shall be made in the form prescribed by the Chief Certification Officer before the date specified for inspection in the application form.

(3) The crop inspection of a seed-field may be refused where application is received too late for the Chief Certification Officer to make satisfactory arrangements for the inspection.

(4) For the purpose of inspection of seed crop, the Land and Field Standards applicable shall be those adopted by the Tanzania Official Certification Agency.

Sampling

21.—(1) For the purpose of these Regulations, unless the context otherwise requires, the following expressions shall have the meaning hereby assigned to them—

"primary sample" means each probe or each handful of seed drawn from a seed lot as a sample. When a seed lot is sampled either in containers or in bulk, several individual samples are drawn from different containers or from different places in the bulk;

"composite sample" means a combination of primary samples placed in a suitable container. A composite sample is usually larger than the size of sample required for tests and it must be placed in a container of such material and size and in such a manner as to ensure that the seed is not mixed with any other matter;

"submitted sample" means a composite sample of a size appropriate for tests. This sample is submitted to a testing station for quality tests;

"working sample" means a portion of a submitted sample on which a quality test is made.

(2) Samples of seed for testing or analysis shall be taken by an inspector in accordance with the requirements prescribed under this regulation.

(3) Except where an inspector requires a larger sample of any kind of seed in any case where he considers it necessary for satisfactory testing, re-testing or analysis, the size of each sample shall comply with the particulars set out in the table appearing under this sub-paragraph, according to the kind of seed.

TABLE

(SAMPLE WEIGHTS IN GRAMMES—FOR ALL GRADES)

	Minimum weight for submitted sample	*Minimum weight for purity analysis*	*Minimum weight for examination for noxious weed seed and foreign matter*
A. CEREAL CROPS:			
Maize *Zea mays*	1,000	900	1,000
Wheat *Triticum destivum*	1,000	120	1,000
Tritirum durum	1,000	120	1,000
Sorghum *Sorghum vulgare*	900	90	900
Rice *Oryza sativa*	400	40	400
Barley *Hordeum vulgare*	1,000	120	1,000
Millet *Eleusine carocana*	90	9	90
Setaria italica	90	9	90

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	Minimum weight for submitted sample	*Minimum weight for purity analysis*	*Minimum weight for examination for noxious weed seed and foreign matter*
B. GRAIN LEGUME AND PULSE CROPS:			
Cow peas *Vigna unguiculata* (*V. senesis, V. catiag*)	1,000	400	1,000
Beans Phaseolus mungo...	1,000	700	1,000
Phaseolus vulgaris—Broad beans... ...	1,000	700	1,000
Phaseolus aureua—Mung bean	1,000	120	1,000
Phaseolus angularis	1,000	250	1,000
Banavist Beans Dolichos Lablab	1,000	400	1,000
Hyaxinth Beans Dolichos Lablab	1,000	700	1,000
Sword Bean *Canavalia emsiformis*	1,000	900	1,000
Pigeon pea *Cajanus Cajan*	1,000	400	1,000
Chickpea *Cicer Orietinum*	1,000	1,000	1,000
Broad bean *Vicia faba*	1,000	1,000	1,000
Pea *Lathyrus spp.*	700	70	700
Field and Garden Pea *Pisum sativum* ...	1,000	900	1,000
Bambara nut *Voandzeia subterranea*	1,000	400	1,000
Greengram *Vigna aureus*	1,000	400	1,000
Blackgram *Vigna mungo*	1,000	400	1,000
C. OIL CROPS:			
Soya beans *Glycine soya*	1,000	500	1,000
Groundnut *Arachia hypogeea*	1,000	900	1,000
Sesame *Sesamum indicum orientale*	70	7	70
Sunflower *Helianthus annus*	1,000	200	1,000
Safflower *Carthamus tinctorius*	900	90	900
Castor *Ricinus cammunis*	1,000	900	1,000
D. FIBRE CROPS:			
Cotton *Gossypium spp*....	1,000	350	1,000
Kenaf *Hibiscus canabinus*	700	70	700
Hibiscus sabdariffa	700	70	700
E. DRUG CROPS:			
Pyrethrum *Chrysanthemum cinerarieafolium*...	100	10	100
Tobacco *Nicotiana tobacum*	25	0.5	25
Nicotiana rustica	25	0.5	25
F. VEGETABLE CROPS INCLUDING ROOT VEGETABLES:			
Tomato *Lycopersicon esculentun*	15	7	10
Onion *Allium cepa*	80	8	80
Egg plant *Solanum melongena*...	150	15	150
Okra *Hibiscus esculentum*	1,000	140	1,000
Cabbage *Brassica oleraces Var. capitata* ...	100	10	100
Cauliflower *Brassica oleracea var. botytis* ...	100	10	100
Sprouting Broceoli *Brassica oleraces var. italica*	100	10	100
Brussels Spraut *Brassica oleracea var. germifera*	100	10	100
Chinese Cabbage *Brassica competris subvar. pekinensis*	40	4	40
Chinese Cabbage *Brassica campetris subvar.* Chinensis	40	4	40
Pepper Capsicum spp.	150	15	150
Celery *Apium graveolens*	25	2	25
Cucumber *cucumis sativus*	150	70	150

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	Minimum weight for submitted sample	*Minimum weight for purity analysis*	*Minimum weight for examination for noxious weed seed and foreign matter*
Squash Pumpkin *cucubita spp.*	1,000	700	1,000
Lettuce *Lectuca sativa*	30	3	30
Spinach *Spinach oleracea*	250	25	250
Carrot *Daucus carota*	30	3	30
Turnip *Brassica cempestris suvar. rapa* ...	70	7	70
Watermelon *Citrullusn vulgaris*	1,000	250	1,000
Muskmelon *Cucumis melo*	150	15	150
Radish *Raphanus sativus*	300	30	300
Swiss Chard *Beta vulgaris l. var. gilla* ...	500	50	5000
G. GRASSES, FORAGE CROPS AND GREEN MANURE:			
Pennisetum Clandestinum	100	10	100
Desmodium spp....	50	5	50
Glycine javanica...	50	5	55
Medicago saliva Lucerne—Alfalfa	50	5	55
Phaseolus atropurpure	75	7	75
Chloris gayana	25	1	20
Dolichos spp.	75	7	75
Sylobanthas gracilis	25	5	25
Hypanheris rhufa	30	3	30
Centhrus ciliaris...	25	5	25
Eragrostis teff	25	5	25
Eragrotis trichodes	25	5	25
Euchleana mecinana	30	3	30
Digitoria smutsii	25	2	20
Eragrostis chloromelas	25	2	20
Eragrostis curvula	30	3	30
Bothriochloa insulpta	30	3	30
Panicum maximum	25	2	20
Panicum antidotale	25	2	20
Panicum maximum var. trichoglume	25	2	25
Panicum coloratum	25	2	25
Panicum obtusum	25	2	20
Panicum virgatum	30	3	30
Melinis minufilora	25	0.5	5
Lupine spp.	1,000	450	1,000
Pannisetum typhoides	60	6	60
Seteria splendida	90	9	90
Seteria sphacelate	90	9	90
Sorghum alum	700	20	200
Pennisetum purpureum	60	6	60
Sorghum sudanense	250	25	250
Trifolium repens	25	2	20
Ornithopus sativus	90	9	90
Crotalaria intermedia	150	15	150
Crotalaria juncea	700	70	700
Crotalaria lanceolata	70	7	70
Crotalaria mueronate/Striata	150	15	150
Crotalaria spectabilis	350	35	350
Cynodon dactylon	25	1	10
Themeda triandra	25	2	25
Eragrostis superba	25	2	25
Cynodon plectostachyus	25	1	10
Brachiaris brizantha	30	3	30
Trypsacum laxum	30	3	30

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	Minimum weight for submitted sample	*Minimum weight for purity analysis*	*Minimum weight for examination for noxious weed seed and foreign matter*
Brachiaria ruziziensis	30	3	30
Centrosema pubescens	150	15	150
Pueraria phaseoloides	350	35	350
Stylosanthes humilis	100	10	100
Stylosanthes mucronata...	50	5	50
Clitoria ternatea...	100	10	100

H. ROOT CROPS AND SPICES:
Potato. (Irish) *Solanum tuberasum.*
Garlic.
Ginger.
Cardamon.

(4) Notwithstanding the provisions of paragraph (3) of this regulation, if the sample is required to check only the percentage of germination of seed of any of the kinds specified under this paragraph, the inspector may require that the sample be of the following size according to the kind of seed—

(a) garden beans (except broad and runner beans), garden peas and sweet corn (or sweet maize)—115 grams;

(b) beet, mangel, sugar beet, sugar cane and swiss chard—at least 30 grams.

(5) Where a seed lot—

(a) of sweet maize including hybrid varieties; or

(b) of a variety other than a hybrid variety of garden beans except broad or runner beans, garden peas or a kind specified in Table 15, 18 or 19 of the First Schedule hereto,

is packed in individual containers each of which contains a quantity of seed not exceeding the size of sample prescribd for that kind of seed in paragraph (3) of this regulation, an inspector may require a smaller size of sample than that prescribed under paragraph (3) but not less than 400 seeds.

Sampling intensity

22. When sampling seed lots in bulk, that is to say, in heaps, bins, wagons and the like, or streams of seeds during any processing operation, the following sampling intensity shall be taken as the minimum requirements—

Not exceeding 500 kg.—five primary samples shall be taken except that for small lots not exceeding 50 kg. three or four samples may be taken.

Exceeding 500 kg. but not exceeding 3,000 kg.—one primary sample for every 300 kg. shall be taken, so however, that not less than five primary samples shall be taken.

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Exceeding 3,000 kg. but not exceeding 20,000 kg.—one primary sample for every 500 kg shall be taken, so however, that not less than 10 primary samples shall be taken.

Seed in bulk shall be sampled at random locations and the samples shall be drawn from varying depths. For seed lots in bags or other containers of similar size sampels shall be taken at random locations and the following intensity shall be taken as the. minimum requirements:—

Not exceeding 5 containrers—a sample shall be taken from each container and the aggregate number of primary samples shall not be less than five.

Exceeding 5 conainers but not exceeding 30 containers—a sample shall be taken in every 3 containers and the aggregate number of primary samples shall not be less than five.

Exceeding 30 containers—a sample shall be taken in every 5 containers and the aggregate number of primary samples shall not be less than ten.

Fees

23.—(1) The fees prescribed in the Second Schedule hereto shall be payable in respect of the services specified in the said Schedule.

(2) The fee for any service shall be paid at the time the applicaiton for the service is made.

(3) The Minister may, by directions in writing or by notice in the *Gazette*, remit in whole or in part any fee payable by any person in respect of any service, if he is satisfied that it is in the public interest so to do.

Methods and procedures for testing seed and limits of variability

24. The methods and procedures for the testing of seeds, including the limits of variability, as set out in the Third Schedule hereto are hereby prescribed for the purposes of the Act and these Regulations.

FIRST SCHEDULE

(Regulation 4)

TABLES OF GRADE STANDARDS

TABLE 1

Applicable to:

(a) Wheat including hybrid—*Triticum ae stivum* L. and

(b) Wheat, durum—*Triticum durum Desf.*

Factor	*Standards for Each Grade*		
	Foundation	*Registered*	*Certified*
	%	%	%
Pure Seed (Minimum)	98.0	98.0	98. 0
Total Weed Seed (Maximum)	.10	.10	.20
Other Crop Seed (Maximum)...	2 per kg.	2 per kg.	4.0
Inert Matter (Maximum)	2.0	2.0	2.0
Other Varieties (Maximum)1	.05	.10	.50
Prohibited Noxious Weeds (Maximum)2	None	None	
Restricted Noxious Weeds (Maximum)2	4 per kg.	4 per kg.	4 per kg.
Moisture (Maximum)	13.0	13.0	13.0
Germination (Minimum)	85.0	85.0	85.0
Loose Smut—*Ustilago nuda* (Minimum)	0.5	2.0	4.0

(1)Other varieties shall not include variations which are characteristic of the variety.

(2)As defined under the Weed Seeds Order, 1976.

G.N. No. 29 (contd.)

TABLE 2

Applicable to:

(a) Barley—*Hordeum vulgare L.H. distichon L.*

(b) Oat—*Avena sativa* L., A. *nuda* L.

Factor	*Standards for Each Grade*		
	Foundation	*Registered*	*Certified*
	%	%	%
Pure Seed (Minimum)	98.0	98.0	98.0
Total Weed Seeds (Maximum)	.10	.10	.20
Other Crop Seeds (Maximum)	2 per kg.	2 per kg.	4 per kg.
Inert Matter (Maximum)	2.0	2.0	2.0
Other Varieties (Maximum)1	.05	10.	.50
Prohibited Noxious Weeds (Maximum)2	None	None	None
Restricted Noxious Weeds (Maximum)2	4 per kg.	4 per kg.	4 per kg.
Moisture (Maximum)	13.0	13.0	13.0
Germination (Minimum)	85.0	85.0	85.0
Loose Smut of Barley *Ustilago nuda* (Maximum) ...	1.0	2.0	4.0

(1)Other varieties shall not include variations which are characteristic of the variety.

(2)As defined under the Weed Seeds Order, 1976.

TABLE 3

Applicable to:

Rice (Paddy)—*Oryza sativa.*

Factor	*Standards for Each Grade*		
	Foundation	*Registered*	*Certified*
	%	%	%
Pure Seed (Minimum)	98.0	98.0	96.0
Total Weed Seeds (Maximum)	.10	.10	.10
Other Crop Seeds (Maximum)	None	10 per kg.	10 per kg.
Inert Matter (Maximum)	2.0	2.0	4.0
Other Varieties (Maximum)1	.05	.10	.50
Prohibited Weeds (Maximum)2	None	None	None
Restricted Noxious Weeds (Maximum)2	None	4 per kg.	4 per kg.
Moisture (Maximum)	13.0	13.0	13.0
Germination (Minimum)	80.0	80.0	80.0
Blast—*Pyricularia—Oryzae* (Maximum)	5.0	5.0	8.0
Bacterial Leaf Blight—*Xanthomonas Oryzae* (Maximum)	2.0	2.0	5.0
White Tip Nematode—*Aphelenchoides Besseyi* (Maximum)	0.0	0.0	2.0

(1)Other varieties shall not include variations which are characteristic of the variety.

(2) As denfied under the Weed Seeds Order, 1976.

G.N. No. 29 (contd.)

TABLE 4

Applicable to:

Sorghum (includes hybrid sorghum)—*Sorghum vulgare* Pers. and *S. almum Parodi* and *Sorghum vulgare* var. (Piper) Hitch.

Factor	*Standards for Each Grade*		
	Foundation	(3)	*Certified*
	%		%
Pure Seed (Minimum)	97.0		97.0
Total Weed Seeds (Maximum)	.20		.50
Other Crop Seeds (Maximum)	None		.10
Inert Matter (Maximum)	3.0		3.0
Other Varieties (Maximum)(1)	.10		.20
Prohibited Noxious Weeds (Maximum)(2)	None		None
Restricted Noxious Weeds (Maximum)(2)	None		4 per kg.
Moisture (Maximum)	13.0		13.0
Germination (Minimum)	75		75

(1)Other varieties shall not include variations which are characteristic of the variety.

(2)As defined under the Weed Seeds Order, 1976.

(3)There shall be no Registered Grade for Hybrid Sorghum.

TABLE 5

Applicable to:

Maize field including open-pollinated and hybrid and sweet maize—*Zea mays* L

Note:—A Registered Grade of open-pollinated Maize may be prescribed by the Certification Agency.

Factor	*Standards for Each Grade*		
	Foundation	(3)	*Certified*
	%		%
Pure Seed (Minimum)	99.0		99.0
Total Weed Seeds (Maximum)	None		None
Other Crop Seeds (Maximum)	None		None
Inert Matter (Maximum)	1.0		1.0
Other Varieties (Maximum)(1)	None		.50
Prohibited Noxious Weeds (Maximum)(2)	None		None
Restricted Noxious Weeds (Maximum)(2)	None		4 per kg.
Moisture (Maximum)	13.0		13.0
Germination (Minimum)	85.0		85.0

(1)Other varieties shall not include variations which are characteristic of the variety.
(2)As defined under the Weed Seeds Order, 1976.
(3)Including Foundation Single Crosses of Maize.

TABLE 6

Applicable to:

Soybean—*Glycine max.*

Factor	*Standards for Each Grade*		
	Foundation	*Registered*	*Certified*
	%	%	%
Pure Seed (Minimum)	97.0	97.0	97.0
Total Weed Seeds (Maximum)	None	None	.05
Other Crop Seeds (Maximum)	None	None	1 per kg.
Inert Matter (Maximum)	3.0	3.0	3.0
Other Varieties (Maximum)(1)	0.10	0.20	0.50
Prohibited Noxious Weeds (Maximum)(2)	None	None	None
Restricted Noxious Weeds (Maximum)(2)	None	None	None
Moisture (Maximum)	13.0	13.0	13.0
Germination (Minimum) and Hard Seeds	75.0	75.0	75.0
Leaf Spot—*Ascochyta Sojaecola* (Maximum) ...	1.0	2.0	4.0
Anthracnose—*Glomerella Glycines* (Maximum) ...	1.0	2.0	4.0
Charcoal Rot—*Macrophomina Phaseoli* (Maximum)	1.0	2.0	4.0

(1)Other varieties shall not include variations which are characteristic of the variety.

(2)As defined under the Weed Seeds Order, 1976.

TABLE 7

Applicable to:

(a) Millet, foxtail—*Setaria italica* (L.) Beauv.

(b) Millet, Japanese—*Echinochloa crusgalli* (L.) Beauv. var. *frumentacea* (Roxb.) Wight.

(c) Millet, pearl—*Pennisetum glaucum* (L.) R.Br.

(d) Millet, proso—*Panicum miliaceum* L.

(e) Millet, Bullrush—*Eleusine carocana.*

(f) Millet, Finger—*Setaria italica.*

Factor	*Standards for Each Grade*		
	Foundation	*Registered*	*Certified*
	%	%	%
Pure Seed (Minimum)	97.0	97.0	97.0
Total Weed Seeds (Maximum)	.50	.50	.50
Other Crop Seeds (Maximum)	0.05	0.05	.10
Inert Matter (Maximum)	3.0	3.0	3.0
Other Varieties (Maximum)(1)	None	.10	1.0
Prohibited Noxious Weeds (Maximum)(2)	None	None	None
Restricted Noxious Weeds (Maximum)(2)	4 per kg.	4 per kg.	4 per kg.
Moisture (Maximum)	13.0	13.0	13.0
Germination (Minimum)	70.0	70.0	70.0

(1)Other varieties shall not include variations which are characteristic of the variety.

(2)As defined under the Weed Seeds Order, 1976.

TABLE 8

Applicable to:

(a) Alfalfa—*Medicago sativa Lucerne.*
(b) Clover, White, incl. Ladino—*Trifolium repens.*
(c) Glycine—*Glycine javanica.*
(d) Lance Crotalaria—*Crotalaria lanceolata.*
(e) Showy Crotalaria—*Crotalaria spectabilis.*
(f) Slender Crotalaria—*Crotalaria intermedia.*
(g) Striate Crotalaria—*Crotalaria mucronata* var. *striata.*
(h) Sunn Crotalaria—*Crotalaria juncea.*
(i) Kudzu—*Pueraria phaseloides.*
(j) Lupines—*Lupine* spp.
(k) Serradella—*Ornithopus sativus.*
(l) Tall Tick clover (Kuru vine)—*Desmodium* spp.
(m) Siratro—*Phaseolus atropurpureus.*

Factor	*Standards for Each Grade*		
	Foundation	*Registered*	*Certified*
	%	%	%
Pure Seed (Minimum)	98.0	98.0	97.0
Total Weed Seeds (Maximum)	.10	.10	.30
Other Crop Seeds (Maximum)	.05	.10	.50
Inert Matter (Maximum)	2.0	2.0	3.0
Other Varieties (Maximum)(1)	.05	.10	.30
Prohibited Noxious Weeds (Maximum)2	None	None	None
Restricted Noxious Weeds (Maximum)2	4 per kg.	4 per kg.	4 per kg.
Moisture (Maximum)	13.0	13.0	13.0
Germinable Seed (Minimum)	50.0	50.0	50.0
Germination and Hard Seed (Minimum)3	80.0	80.0	80.0

(1)Other varieties shall not include variations which are characteristic of the variety.
(2)As defined under the Weed Seeds Order, 1976.
(3)"Hard Seeds" as defined in the Rules of the International Seed Testing Association.

TABLE 9

STANDARDS FOR EACH PEDIGREED GRADE*

Applicable to:

Forage Grasses and Crops.

Kind	*Per cent Inert Matter*		*Per cent Weed Seed*		*Per cent Pure Seed*		*Percent Germination*
	Foundation and Registered	*Certified*	*Foundation and Registered*	*Certified*	*Foundation and Registered*	*Certified*	*Foundation, Regitered and Certified*
Pennisetum clandestinum	4.0	5.0	.20	.50	96.0	95.0	75
Rhodes Grass—*Chloris gayana*	35.0	40.0	.20	.50	65.0	60.0	65
Dolichos spp.	10.0	12.0	.20	.50	o0.0	88.0	75
Stylo—*Stylosanthos gracilis*	3.0	4.0	.20	.50	97.0	96.0	65
Hypanheris rhufa	5.0	7.0	.20	.50	95.0	93.0	75
African foxtail grass—*Centhrus ciliaris*	10.0	15.0	.20	.50	90.0	85.0	65
Teff Grass—*Eragrostis teff*	2.0	3.0	.20	.40	98.0	97.0	75
Sand Lovegrass—*Eragrostis trichoides*	2.0	3.0	.20	.50	98.0	97.0	75
Euchleana mecinana	8.0	10.0	.20	.50	92.0	90.0	75
Digitaria smutsii	3.0	5.0	.20	.50	97.0	95.0	65
Eragrostis chloromelas	2.0	3.0	.20	.50	98.0	97.0	75
Weeping Lovegrass—*Eragrostis curvula*	2.0	3.0	.20	.50	98.0	97.0	75
Bothriochloa insulpta	10.0	15.0	.20	.50	90.0	8 5.0	60
Guines Grass—*Panicum maximum*	5.0	8.0	.20	.50	95.0	92.0	60
Blue panicgrass—*Panicum antidotale*	5.0	8.0	.20	.50	95.0	92.0	60
Green panicgrass—*Panicum maximum* var. *trichoglume*	5.0	8.0	.20	.50	95.0	92.0	60
Panicum coloratum	5.0	8.0	.20	.50	95.0	92.0	60
Vine mesquite—*Panicum obtusum*	5.0	8.0	.20	.50	95.0	92.0	60
Switchgrass—*Panicum virgatum*	5.0	8.0	.20	.50	95.0	92.0	60
Melinis minufiflora	5.0	10.0	.20	.50	95.0	90.0	60
Pennisetum typhoida	4.0	5.0	.20	.50	96.0	95.0	75
Setaria sphacelate	10.0	15.0	.10	.50	90.0	85.0	60
Setaria splendida	10.0	15.0	.20	.50	90.0	85.0	60
Columbus grass—*Sorghum almum*	4.0	8.0	.20	.50	96.0	92.0	75
Hapier grass—*Pennisetum purpureum*	4.0	5.0	.20	.50	96.0	95.0	75

Kind	Per cent Inert Matter		Per cent Weed Seed		Per cent Pure Seed		Percent Germination
	Foundation and Registered	Certified	Foundation and Registered	Certified	Foundation and Registered	Certified	Foundation, Regitered and Certified
Bermuda grass—*Cynodon dactylon*	4.0	5.0	.20	.50	96.0	95.0	75
Themeda triandra	5.0	8.0	.20	.50	95.0	92.0	60
Lovegrass—*Eragrostis superba*	2.0	3.0	.20	.50	98.0	97.0	75
Cynodon plectostachyus	4.0	5.0	.20	.50	96.0	95.0	75
Lovegrass—*Brachiaria brizantha*	5.0	8.0	.20	.50	95.0	92.0	70
Trypsacum laxum	5.0	8.0	.20	.50	95.0	92.0	70
Brachiaria ruziziensis	5.0	8.0	.20	.50	95.0	92.0	70
Centro—*Centrosema pubescens*	2.0	3.0	.20	.50	98.0	97.0	65
Stylosanthes humilis	3.0	4.0	.20	.50	97.0	96.0	65
Stylosanthes mucronata	3.0	4.0	.20	.50	97.0	96.0	65
Clitoria ternatea	4.0	6.0	.20	.50	96.0	94.0	65

*Other crop seed content shall not exceed as follows:—

	%
For Foundation and Registered Grades	.50
For Certified Grade	1.00

TABLE 10

Applicable to:

(a) Sunflower (cultivated)—*Helianthus annus.*

(b) Safflower—*Carthamus Finctortas.*

Factor	*Standards for Each Grade*		
	Foundation	*Registered*	*Certified*
	%	%	%
Pure Seed (Minimum)	97.0	97.0	97.0
Total Weed Seeds (Maximum)	.05	.10	.20
Other Crop Seeds (Maximum)	None	None	.20
Inert Matter (Maximum)	3.0	3.0	3.0
Other Varieties (Maximum)1	.05	.10	.30
Prohibited Noxious Weeds (Maximum)2	None	None	None
Restricted Noxious Weeds (Maximum)2	None	None	4 per kg.
Moisture (Maximum)	13.0	13.0	13.0
Germination (Minimum)	70.0	70.0	70.0

(1) Other varieties shall not include variations which are characteristic of the variety.

(2) As defined under the Weed Seeds Order, 1976.

TABLE 11

Applicable to Mixtures of Forage Seeds of two or more of the kinds of seeds listed in Tables 8 and 9 of this Schedule.

"Mixture" means each component present in excess of 5 per cent of the whole.

Grade Name	*Maximum number of seeds per Kg. except where otherwise stated*			*Minimum percentage germination*
	Noxious Weed Seeds		*Total Weed Seeds*	*Each Ingredient*
	Prohibited	*Restricted*		
			%	%
Common seed mixture	0	4 per kg.	1.5	60

Note:—1. Mixtures of grass seeds not designated by the sender as lawn or turf grass mixtures shall be graded under this table.

2. Percentage purity and germination of each component in the order of predominance shall be stated on the seed label.

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TABLE 12

Applicable to:

(a) Cotton—*Gossypium* spp.
(b) Kenaf—*Hibiscus canabinus.*
(c) Roselle—*Hibiscus sabdariffa.*

Factor	*Standards for Each Grade*		
	Foundation	*Registered*	*Certified*
	%	%	%
Pure Seed (Minimum)	97.0	97.0	96.0
Total Weed Seeds (Maximum)	.02	.05	.20
Other Crop Seed (Maximum)...	None	None	.20
Inert Matter (Maximum)	3.0	3.0	4.0
Other Varieties (Maximum) (1)	.10	.20	.50
Prohibited Noxious Weeds (Maximum)(2)	None	None	None
Restricted Noxious Weeds (Maximum)(2)	None	None	4 per kg.
Moisture (Maximum)	13.0	13.0	13.0
Germination and Hard Seed (Minimum)	80.0	80.0	80.0
Bacterial Blight—*Xanthomonas Malvacearum* (Maximum)	0.5	1.0	2.0

(1)Other varieties shall not include variations which are characteristic of the variety.

(2)As defined under the Weed Seeds Order, 1976.

TABLE 13

Applicable to:

(a) Bambara Nut—*Voandzeia subterranea.*
(b) Groundnut—*Arachia hypogeea.*

Factor	*Standards for Each Grade*		
	Foundation	*Registered*	*Certified*
	%	%	%
Pure Seed (Minimum)	97.0	97.0	97.0
Total Weed Seeds (Maximum)	.01	.05	.10
Other Crop Seeds (Maximum)	None	None	None
Inert Matter (Maximum)(1)	3.0	3.0	3.0
Other Varieties (Maximum)(2)	None	.20	.50
Prohibited Noxious Weeds (Maximum)(3)	None,	None	None
Restricted Noxious Weeds (Maximum)(3)	None	4 per kg.	4 per kg.
Germination and Hard Seed (Minimum)	75.0	75.0	75.0
Moisture (Maximum)	9.0	9.0	9.0
Rosette (Maximum)	1.0	2.0	4.0

(1)For Spanish type, Runner type, and Virginia type seed groundnut, an additional 3.0 per cent inert matter consisting of "bald head" (seed coat removed) shall be permitted.

(2)Other varieties shall not include variations which are characteristic of the variety.

(3)As defined under the Weed Seeds Order, 1976.

TABLE 14

Applicable to:

(a) Sesame—*Sesamum indicum orientale.*

(b) Tobacco—*Nicotiana tabacum, Nicotiana rustica.*

Factor	*Standards for Each Grade*		
	Foundation	*Registered*	*Certified*
	%	%	%
Pure Seed (Minimum)	98.0	98.0	97.0
Total Weed Seeds (Maximum)	.10	.20	.30
Other Crop Seeds (Maximum)	.05	.10	.20
Inert Matter (Maximum)	2.0	2.0	3.0
Other Varieties (Maximum)(1)	None	None	.10
Prohibited Noxious Weeds (Maximum)(2)	None	None	None
Restricted Noxious Weeds (Maximum)(2)	4 per kg.	4 per kg.	4 per kg.
Moisture (Maximum)	13.0	13.0	13.0
Germination (Minimum)	80.0	80.0	80.0
Anthracnose (Maximum)(3)	None	None	.01
Angular Leaf Spot—*Pseudomonas angulata* (Maximum)	None	None	None
Frog-Eye, Green Spot—*Cercospora Nicotianae* (Maximum)	None	None	None
Tobacco Mosaic Virus (Maximum)	None	None	None

(1)Other varieties shall not include variations which are characteristic of the variety.

(2)As defined under the Weed Seeds Order, 1976.

(3)For tobacco seed, the seed shall be treated with silver nitrate (Ag NO3) before sale. Pedigree seed to be grown in sterile soil for six weeks to check for absence of Antcrah nose.

TABLE 15

Applicable to:

(a) Bean—*Phaseolus vulgaris.*
(b) Bean, broad—*Vicia faba.*
(c) Bean, Lima—*Phaseolus lunatis* var. *macrocarpus.*
(d) Bean, runner—*Phaseolus coccineus.*
(e) Chick pea—*Cicer arietinum.*
(f) Cow pea—*Vigna sinensis* et. al.
(g) Mung Bean—*Phaseolus aureua.*
(h) Banavist Bean—*Dolichos Lablab.*
(i) Hyacinth Bean—
(j) Sword Bean—*Canavalia emsiformis.*
(k) Blackgram—*Vigna mungo.*
(l) Greengram—*Vigna aureus.*
(m) Pigeon pea—*Cajanus cajan.*
(n) Pea—perennial—*Lathyrus* spp.
(o) Castor bean—*Ricinus cammunis.*

Factor	*Standards for Each Grade*		
	Foundation	*Registered*	*Certified*
	%	%	%
Pure Seed (Minimum)	98.0	98.0	98.0
Total Weed Seeds (Maximum)	None	2 per kg.	4 per kg.
Other Crop Seeds (Maximum)	None	None	2 per kg.
Inert Matter (Maximum)	2.0	2.0	2.0
Other Varieties or Classes (Maximum)1	.01	.05	.10
Prohibited Noxious Weeds (Maximum)2	None	None	None
Restricted Noxious Weeds (Maximum)2	None	None	None
Moisture (Maximum)	12.0	12.0	12.0
Germination (Minimum)	80.0	80.0	80.0
Common Bacteric Blight—*Xanthomonas phaseoli* (Maximum)	None	None	None
(3)Anthracones—*Coletrichum lindemunthiane* (Maximum)	None	None	None
(3)Bacteria Wilt—*Cyne bacterium flaccumfaciens* (Maximum)	None	0.5	1.0
Bean Mosaic Virus (B.M.V.)	None	0.5	0.5
(3)Halo Blight—*Psydomonas phaseoli*	None	0.5	1.0

(1)Other varieties shall not include variations which are characteristic of the variety.
(2)As defined under the Weed Seeds Order, 1976.
(3)The grower shall be responsible for having disease tests made on the harvested seed of each field.

TABLE 16

Applicable to:

(a) Ginger—*Zingiber officinalis.*
(b) Cardamom—*clittaria cardamomum.*
(c) Pyrethrum—*Chrysanthemum cinerarieafolium.*

Notes (1)Parent Planting Stock.
(2)Percentages to be based on counts.

Factor	*Standards for Each Grade*		
	Foundation	*Registered*	*Certified*
	%	%	%
Pure Living splits or cuttings (Minimum)	98.0	98.0	97.0
Total Weeds (Maximum)	None	None	None
Other Living Plants (Maximum)	1.0	1.0	1.0
Inert Matter (Maximum)	1.0	1.0	2.0
Prohibited Noxious Weeds (Maximum)(1)	None	None	None
Restricted Noxious Weeds (Maximum)(1) ...	None	None	4 per kg.
Germination (Minimum)	95.0	95.0	95.0
Other Varieties (Maximum)(2)	None	None	0.50
Bacterial Fascial—*Corynebacterium fascians* ...	2.0	2.0	2.0
Bright Gray Mold—*Botrytis cinerea* (pa)	2.0	2.0	2.0
Damping Off—*Gloesporium spp.*	2.0	2.0	2.0
Root Rot—*Pythium spp.*	2.0	2.0	2.0
Phymatotrichum omnivorum (Tex) or *Rizizotania Solani*	2.0	2.0	2.0
Stem Rot—*Sclerotinia scrclerotiorum*	2.0	2.0	2.0
Aster Yellow—*Chlorogenus callistephi*	2.0	2.0	2.0
Leaf Eelworm—*Aphelenchoides ritzema—bosi* ...	None	None	None
Root Knot Eelworm—*Meloidoggne hapla*	None	None	None

1 As defined under the Weed Seeds Order, 1976.

2 Other varieties shall not include variations which are characteristic of the variety.

Classes and Sources of Certified Seed of Cassava and Root Cutting Crops or other Vegetatively Propagated Crops:

1. Foundation plants are first year propagation from plants that are free from nematodes and that have been indexed as free from virus diseases other than latent. These plants must be grown under strict isolation in a greenhouse in which only plants that are indexed as virus-free are planted.
2. Registered plants are first year propagation from foundations.
3. Certified plants are first year propagation from Registered or Foundation plants. Specific standards shall be those established by the Certification Agency in accordance with the pvovisions of the Act.

TABLE 17

Applicable to:

Onion Sets and multiplier onions (Including Garlic).

1	2	3	4
Grade Name	*Size square mesh screen*	*Variety and Colour*	*General Quality*
1. Common seed	Diameter $\frac{3}{8}$ to $\frac{7}{8}$	Not less than 98 per cent one variety and colour	Mature, well cured sound, free from decay and dry. Practically free from tops, dirt, leaves, or other foreign matter, from disease and moulds and from insect, mechanical, frost or other damage. Practically free from sprouted and soft bulbs when graded.

Note:—1. The size standards under Column 2 do not apply to multiplier onions.

2. Onion sets may be labelled "pin-head" onion sets when they conform to the standards specified in this table and when the diameter of the sets is not more than $\frac{3}{4}$"

3. The following are the generally accepted identification and distinction between *Onion sets* and *Onion multipliers. Onion sets: (Allum cepa)* small bulbs or "sets" grown from seed used to plant for the production of mature onions. Since A. cepa is perennial, in the temperate zone, the sets are produced one season for planting in the next season. They are, in a practical sense just very small onions.

Onion multipliers: (A. cepa, var: *varaggratum).* The example variety produces branching at the base of the bulb which, when divided, can be used as propagating material for planting. The practical example in Tanzania is the Spring onion.

In the General Allum there are at least four basic means of propagation: Seed, Cloves, Topsets, and Multipliers. Seed: to produce mature onions, or for the production of *transplants* or *sets. (Allum cepa).*

Bulb segments or *cloves: (A. Sativum)*—Garlic. The separation of segments of the garlic bulb provides the usual propagation material. Seldom is garlic seed used.

Topsets are the small bulb-like planting material produced in the flower cluster, sometimes in conjunction with seed. *(A. cepa,* var. *vivaparum).*

Multipliers are the division of the branchings at the base of the crown which are used for propagation. *(A. cepa,* var; *aggregatum)*—Spring onions.

TABLE 18

Applicable to:

Vegetable Crops.

MINIMUM STANDARDS APPLICABLE TO PEDIGREE GRADES

	Purity (Minimum)	*Germination (Minimum)*
	%	%
Beans (all types	98	80
Beet (incl. swiss chard)	98	65
Broccoli	98	80
Brussels Sprouts	98	80
Cabbage	98	80
Carrot	98	60
Cauliflower	98	80
Celery	90	60
Cucumber	99	75
Eggplant	98	70
Kale	98	70
Kohlrabi	98	80
Leek	98	70
Lettuce	98	75
Marrow	98	75
Muskmelon	98	75
Okra	98	75
Onion	98	70
Parsley	98	70
Parsnip	98	60
Peas	99	80
Pepper	90	60
Pumpkin	98	75
Radish	98	80
Spinach	90	60
Squash	98	75
Sweet Maize	99	80
Tomato	98	80
Turnip	98	80
Watermelon	98	80
Root crops—Potatoes	99.5	—

GRADE A: Not more than 1 per cent tuber moth infection.
Not more than 0.25 per cent spindle Tuber.
Bacterial wilt: None.
Root knot nematode: None.
Mechanical damage: Not more than 2.0 per cent.
Rhictoria (black scurf): Not more than .25 per cent.

GRADE B: Same as Grade A except: Not more than 2.5 per cent Tuber moth inf.
Not more than 1.0 per cent Root know Nematode.

Tuber Size: "Small"—1 inch to 1½ inches.
"Medium"—1½ inches to 2 inches.
"Large"—2 inches to 2½ inches.
"Mixed"—1 inch to 2½ inches.

TABLE 19

Applicable to:

COMMON GRADE SEED

1. Prohibited Noxious Weeds: None.
2. Restricted Noxious Weeds: Maximum allowed shall be ten (10).
3. Total Weed Seed content. The maximum by weight shall not exceed 1.5 per cent.
4. Minimum Seed Standards.

	Minimum Purity %	*Minimum Germination* %
A. CEREAL CROPS:		
Maize	95	80
Wheat	95	80
Sorghum	95	70
Rice	95	75
Oats	95	80
Barley	95	80
Millet	95	65
B. GRAIN LEGUME AND PULSE CROPS:		
Cow peas	95	70
Bean, Mung	95	70
Bean, Broad	95	70
Bean, Banavist	95	70
Bean, Hyaxinth	95	70
Bean, Sword	95	70
Bean—other kinds	95	70
Pigeon pea	95	70
Pea—*Lathyrus* spp.	95	70
Pea—Field and Garden	95	70
Bambara Nut	95	70
Greengram	95	70
Blackgram	95	70
C. OIL CROPS:		
Soybean	95	70
Groundnut	95	70
Sesame	95	70
Sunflower	95	65
Safflower	95	65
Castor Bean	97	75
D. FIBRE CROPS:		
Cotton	95	75
Kenaf	95	75
Roselle	95	75
E. DRUG CROPS:		
Pyrethrum	95	85
Tobacco	95	75
F. VEGETABLE CROPS:		
Tomato	95	75
Onion	95	65
Eggplant	95	65
Okra	95	70
Cabbage	95	75
Cauliflower	95	75
Broccoli	95	75
Brussel Sprout	95	75
Pepper	85	55

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	Minimum Purity	*Minimum Germination*
	%	%
Celery	85	50
Cucumber	95	70
Squash, Pumpkin	95	70
Spinach	95	55
Carrot	95	55
Turnip	95	75
Watermelon	95	75
Muskmelon	95	70
Raddish (including beet)	95	75
Swiss Chard	95	60
G. GRASSES, FORAGE CROPS AND GREEN MANURE:		
African Foxtail Grass—*Cenchrus ciliaris*	80	50
Centro—*Centrsema pubescens*	95	50
Columbus Grass—*Sorghum almum*	95	70
Guinea grass—*Panicum maximum*	90	50
Kuru vine—*Desmodium intatum*...	95	50
Rhode Grass—*Chloris gayana*	30	50
Siratro—*Phaseolus atropurpureus*	95	50
Stylo—*Stylosanthes gayanensis*	95	60
Lance Crotalaria—*Crotalaria lanceolata*	95	70
Striate Crotalaria—*Crotalaria mucronate* var. *Striata* ...	95	70
Showy Crotalaria—*Crotalaria spectabilis*	95	70
Kudzu—*Pueraria phaseoloides*	95	70
Teff Grass—*Eragrostis teff*	95	75
Weeping Lovegrass—*Eragrostis curvula*	95	75
Pennisetum clandestinum	95	60
Dolichos spp....	85	60
Hypanheris rhufa	90	65
Sand Lovegrass—*Eragrostis trichoides*	95	65
Euchleana mecinana	85	60
Digitaria smutsii	90	50
Eragrostis chloromelas	95	65
Bothriochloa insulpta	80	50
Blue panicgrass—*Panicum antidotale*	85	40
Green panicgrass—*Panicum maximum* var. *trichoglume* ...	85	40
Panicum coloratum	85	40
Vine mesquite—*Panicum obtusum*	80	40
Switchgrass—*Pancicum virgatum*	85	50
Melinis minufiflora	85	50
Pennisetum typhoides	95	60
Setaria sphacelate	80	50
Setaria splendida	80	50
Napier Grass—*Pennisetum purpureum*	95	60
Bermuda Grass—*Cynodon dactylon*	80	65
Cyndon plectostachyus	80	65
Themeda triandra	80	50
Lovegrass—*Eragrostis superba*	95	65
Brachiaria brizantha...	85	60
Trypsacum laxum	85	60
Brachiaria ruziziensis	85	60
Stylosanthes humilis	90	50
Clitoria ternatea	90	50
Alfalfa—*Medicago sativa*	95	75
Glycine—*Glycine javanica*	95	60
Siratro—*Phaseolus atropurpureus*	95	75
Lupine spp.	95	75
White Clover incl. Ladino—*Trifolium repens*	95	75
Serradella—*Ornithopus sativus*	95	75
Slender leaf Crotalaria—*Crotalaria intermedia*	95	70
Sunn Crotalaria—*Crotalaria juncea*	95	70

TABLE 20

CERTIFIED TREE AND SHRUB SEEDS

1. Foundation tree seed shall be seed from trees of proven genetic superiority as defined by the Tanzania Official Certification Agency and so produced as to ensure genetic identity (seeds from inter-specific hybrids of forest trees may be included).
   (a) Registered tree and shrub seeds shall be the seed progeny grown from foundation tree or trees and shrubs.
   (b) Certified seed shall be the seed progeny grown from either registered or foundation trees.
2. Specific standards shall be those established by the Tanzania Official Certification Agency in accordance with the provisions of the Act.

TREE AND SHRUB SEEDS

The term "tree and shrub seeds" includes seed of woody plants commonly known and sold as tree and shrub seeds in Tanzania.

SECOND SCHEDULE

(Regulation 23)

FEES FOR SERVICES

Service	*Fee in Shs.*
Seed field inspection made to determine the eligibility of a crop for pedigree status:	
(1) for hybrid maize per hectare inspected	12
(2) for all other kinds of seed crops, per hectare inspected ...	12
a. Seed inspection:	
(1) for barley, beans, sorghum, maize, rice, oats, peas, soybeans, and wheat, per 25 kg. or part thereof	1
(2) for flax, millet and oilseed rape, per 25 kilos or part thereof...	1
(3) for alfalfa, clovers and grasses, per 25 kilos or part thereof ...	1
(4) for seed of any other vegetable or root crop, per hectare or part thereof	12
(5) for any kind of seed not referred to in (1) to (4), per hectare or part thereof	12
b. Minimum fee for each seed lot inspected	15
a. Seed testing:	
For seed of cereals, maize, oil and fibre crops, beans, peas, vegetables and root crops and of any other kinds listed in the First Schedule:	
(1) for each germination test	15
(2) for each purity test	15
b. For seeds of foreign crops of the kinds listed in the First Schedule:	
(1) for each germination test	15
(2) for each purity test	20
c. For forage seed mixtures:	
(1) for each germination test	25
(2) for each purity test	30
d. For lawn and turf grass mixtures:	
(1) for each germination test	35
(2) for each purity test	40
e. For a percentage pure seed test, where this is not normally a part of the germination test, per sample	30
4. Certificates:	
a. A seed testing certificate on an official sample from seed that is imported or subsequently exported	The amount prescribed for seed testing for the kind of seed.
b. A certificate of origin in respect of seed	5

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THIRD SCHEDULE

(Regulation 24)

METHODS AND PROCEDURES FOR SEED TESTING AND LIMITS OF VARIABILITY

The purposes of these Regulatio s and of providing seed analysis results for labelling of seed as required under these Regulations, and for determining the limits of variability of seed analysis results (Tolerance), the International Rules of Seed Testing of the International Seed Testing Association shall be used. (Volume 31, Number 1, 1966, 152 pages, or subsequently published Rules of said Association shall apply.

Analysits, as designated by the Minister, of the Tanzania National Seed Testing Laboratory or of any other officially designated seed testing laboratory in Tanzania shall obtain the results of seed analysis on seed samples submitted for testing by following the above named Rules of Seed Testing. The result of seed analysis shall be regarded as being the official results for labelling purposes as specified by these Regulations.

Dar es Salaam,
13th December, 1975

J. S. MALECELA,
Minister for Agriculture