



UNIE VAN SUID-AFRIKA
UNION OF SOUTH AFRICA

BUITENGEWONE

Staatskoerant Government Gazette

EXTRAORDINARY

(As 'n Nuusblad by die Poskantoor Geregistreer)

(Registered at the Post Office as a Newspaper)

VOL. CXCIV.] PRYS 6d. PRETORIA, 7 AUGUSTUS 1959. PRICE 6d. [No. 6269.
7 AUGUST

GOEWERMENSKENNISGEWINGS.

DEPARTEMENT VAN LANDBOU-TEGNIJSE DIENSTE.

No. 1245.] [7. Augustus 1959.
TOEPASSING VAN WET NO. 36 VAN 1947 OP
SEKERE SAADSOORTE.

Kragtens die bevoegdheid my verleen by artikel een van die Wet op Misstowwe, Veevoedsel, Saad en Middels, 1947 (Wet No. 36 van 1947), soos gewysig, verklaar ek die saad genoem in die Bylae hiervan tot saad vir die toepassing van genoemde Wet en herroep ek hierby Goewermenskennisgewing No. 1213 van 11 Junie 1948.

P. M. K. LE ROUX,
Minister van Landbou-tegniese Dienste.

BYLAE.

Die saad van—

(a) die volgende voergrasse:—

Agrostis alba L.;
Bromus catharticus Vahl.;
Bromus inermis Leyss.;
Chloris gayana Kunth;
Dactylis glomerata L.;
Digitaria smutsii Stent;
Ehrharta calycina Sm.;
Eragrostis curvula (Schrud.) Nees;
Eragrostis tef (Zucc.) Trotter;
Festuca arundinacea Schreb;
Festuca pratensis Huds. (*F. elatior* L.);
Festuca rubra L.;
Festuca rubra L. var. *commutata* Gaud.;
Lolium multiflorum Lam.;
Lolium perenne L.;
Lolium loliaceum Hand.-Mazz. (*L. subulatum* Vis.,
L. rigidum Gaudin var. *rottboellioides* Heldr.
ex Boiss.);
Paspalum dilatatum Poir.;
Paspalum urvillei Steud.;
Phalaris arundinacea L.;
Phalaris tuberosa L.;
Poa pratense L.;
Setaria sphacelata (Schumach.) Stapf;
Sorghum alnum L. Parodi;
Sorghum sudanense (Piper) Stapf;

(b) die volgende voerpeulgewasse:—

Lespedeza stipulacea Maxim Koreaanse lespe-
deza;
Lupinus albus L. witlupien;
Lupinus angustifolius L. bloulupien;
Lupinus luteus L. geellupien;
Medicago sativa L. lusern;
Ornithopus sativus Link serradella;
Trifolium fragiferum L. aarbeiklawer;
Trifolium incarnatum L. inkarnaatklawer;
Trifolium pratense L. rooiklawer;

GOVERNMENT NOTICES.

DEPARTMENT OF AGRICULTURAL TECHNICAL SERVICES.

No. 1245.] [7 August 1959.
APPLICATION OF ACT NO. 36 OF 1947 TO
CERTAIN SEEDS.

Under the powers vested in me by section one of the Fertilizers, Farm Feeds, Seeds and Remedies Act, 1947 (Act No. 36 of 1947), as amended, I do hereby declare the seeds mentioned in the Schedule hereto to be seeds for the purposes of the said Act and I do hereby repeal Government Notice No. 1213 of 11th June, 1948.

P. M. K. LE ROUX,
Minister of Agricultural Technical Services.

SCHEDULE.

The seed of—

(a) the following forage grasses:—

Agrostis alba L.;
Bromus catharticus Vahl.;
Bromus inermis Leyss.;
Chloris gayana Kunth;
Dactylis glomerata L.;
Digitaria smutsii Stent;
Ehrharta calycina Sm.;
Eragrostis curvula (Schrud.) Nees;
Eragrostis tef (Zucc.) Trotter;
Festuca arundinacea Schreb;
Festuca pratensis Huds. (*F. elatior* L.);
Festuca rubra L.;
Festuca rubra L. var. *commutata* Gaud.;
Lolium multiflorum Lam.;
Lolium perenne L.;
Lolium loliaceum Hand.-Mazz. (*L. subulatum* Vis.,
L. rigidum Gaudin var. *rottboellioides* Heldr. ex Boiss);
Paspalum dilatatum Poir.;
Paspalum urvillei Steud.;
Phalaris arundinacea L.;
Phalaris tuberosa L.;
Poa pratensis L.;
Setaria sphacelata (Schumach.) Stapf;
Sorghum alnum L. Parodi;
Sorghum sudanense (Piper) Stapf;

(b) the following forage legumes:—

Lespedeza stipulacea Maxim., Korean Lespedeza;
Lupinus albus L., white lupin;
Lupinus angustifolius L., blue lupin;
Lupinus luteus L., yellow lupin;
Medicago sativa L. lucerne (alfalfa);
Ornithopus sativus Link Serradella;
Trifolium fragiferum L. strawberry clover;
Trifolium incarnatum L. crimson clover;
Trifolium pratense L. red clover;

Trifolium repens L. witklawer;
Trifolium repens L. var. *latum* ladino-witklawer;
Trifolium subterraneum L. ondergrondse klawer;
Vicia sativa L. gewone wieke;
Vicia villosa Roth. harige wieke;

(c) die volgende weidingskruid:—

Atriplex semi-baccata R. Br. kruipsoutbos;

(d) die volgende akkerbougewasse:—

Beta vulgaris L. var. *macrorhiza* mangelwortel;
Brassica campestris L. koolraap;
Brassica napus L. var. *biennis* (Schubl. en Mart) Reichb. we'kool;
Brassica oleracea L. var. *acephala* DC. beeskool
 (Chou Moellier, 1,000-headed, ens.);
Brassica rapa L. beesraap;
Raphanus sativus L. Japanese radys;

(e) die volgende groentegewasse:—

Allium cepa L. ui;
Allium porrum L. prei;
Beta vulgaris L. var. *cicla* (L.) Aell. spinasiebeet;
Beta vulgaris L. var. *hortensis* tuinbeet;
Brassica oleracea L. var. *botrytis* L. broccoli;
Brassica oleracea L. var. *botrytis* L. blomkool;
Brassica oleracea L. var. *capitata* L. kopkool;
Brassica oleracea L. var. *caulorapa* DC. kohlrabi;
Brassica oleracea L. var. *gemmifera* Zenker
 Brusselse spruitjies;
Brassica rapa L. raap;
Cichorium endivia L. andywie;
Citrullus vulgaris Schrad. waatlemoen;
Cucumis melo L. spanspek;
Cucumis sativus L. komkommer;
Cucurbita moschata Duchesne C. maxima Du-
 chesne et C. pepo L. skorsie en pampoen;
Daucus carota L. wortel;
Lactuca sativa L. blaarslaai;
Lycopersicon esculentum Mill. tamatie;
Pastinaca sativa L. witwortel;
Phaseolus vulgaris L. stamboon;
Phaseolus vulgaris L. rankboon;
Pisum sativum L. ert;
Raphanus sativus L. radys;
Solanum melongena L. var. *esculentum* Nees
 eiervrug;
Vicia faba L. boerboon;
Zea mays L. var. *saccharata* Bailey suikermielie.

No. 1246.]

[7 Augustus 1959.

SAADHOUERVEREISTES, MERK VAN EN VER-
 KLARINGS OP SAADHOUERS, VERKLARINGS
 IN ADVERTENSIES, INVOER, MONSTERNE-
 MING EN TOETS EN DIE HOU VAN OPGAWES
 VAN SAAD.

Sy Eksellensie die Goewerneur-generaal het, kragtens die
 bevoegdheid hom verleen by artikel drie-en-twintig van die
 Wet op Misstawe, Veevoedsel, Saad en Middels, 1947
 (Wet No. 36 van 1947), soos gewysig, die regulasies
 gemaak soos in die Bylae hiervan uiteengesit.

BYLAE.

WOORDOMSKRYWING.

1. In hierdie regulasies beteken—

„saad” die saad van—

(a) die volgende voergrasse:—

Agrostis alba;
Bromus catharticus;
Bromus inermis;
Chloris gayana;
Dactylis glomerata;
Digitaria smutsii;
Ehrharta calycina;
Eragrostis curvula;
Eragrostis tef;
Festuca arundinacea;

Trifolium repens L. white clover;
Trifolium repens L. var. *latum* ladino clover;
Trifolium subterraneum L. subterranean clover;
Vicia sativa L. common vetches;
Vicia villosa Roth. hairy vetches;

(c) the following pasture herbs:—

Atriplex semi-baccata R. Br. creeping saltbush;

(d) the following field crops:—

Beta vulgaris L. var. *macrorhiza* mangel beet;
Brassica campestris L. cattle Swede;
Brassica napus L. var. *biennis* (Schubl. and Mart.)
 Reichb. Rape;
Brassica cleracea L. var. *acephala* DC. Kale
 (Chou Moellier, 1,000-headed, etc.);
Brassica rapa L. cattle turnip;
Raphanus sativus L. Japanese radish;

(e) the following vegetables:—

Allium cepa L. onion;
Allium porrum L. leek;
Beta vulgaris L. var. *cicla* (L.) Aell. spinach beet;
Beta vulgaris L. var. *hortensis* beet, garden;
Brassica cleracea L. var. *botrytis* L. broccoli;
Brassica cleracea L. var. *botrytis* L. cauliflower;
Brassica cleracea L. var. *capitata* L. cabbage;
Brassica cleracea L. var. *caulorapa* DC. kohlrabi;
Brassica cleracea L. var. *gemmifera* Zenker
 Brussels sprouts;
Brassica rapa L. turnip;
Cichorium endivia L. endive;
Citrullus vulgaris Schrad. watermelon;
Cucumis melo L. muskmelon;
Cucumis sativus L. cucumber;
Cucurbita moschata Duchesne, C. maxima Du-
 chesne et C. pepo L. squash and pumpkin;
Daucus carota L. carrot;
Lactuca sativa L. lettuce;
Lycopersicon esculentum Mill. tomato;
Pastinaca sativa L. parsnip;
Phaseolus vulgaris L. bean, garden, dwarf;
Phaseolus vulgaris L. bean, garden, runner;
Pisum sativum L. pea;
Raphanus sativus L. radish;
Solanum melongena L. var. *esculentum* Nees egg-
 plant;
Vicia faba L. broadbean;
Zea mays L. var. *saccharata* Bailey sweetcorn;

No. 1246.]

[7 August 1959.

SEED CONTAINER REQUIREMENTS, MARKING
 OF AND STATEMENTS ON SEED CONTAIN-
 ERS, STATEMENTS IN ADVERTISEMENTS,
 IMPORTATION, SAMPLING AND TESTING
 AND KEEPING OF RECORDS OF SEED.

His Excellency the Governor-General has, under the
 powers vested in him by section twenty-three of the Fer-
 tilizers, Farm Feeds, Seeds and Remedies Act, 1947 (Act
 No. 36 of 1947), as amended, made the regulations set
 out in the Schedule hereto.

SCHEDULE.

DEFINITIONS.

1. In these regulations—

“seed” means the seed of—

(a) the following forage grasses:—

Agrostis alba;
Bromus catharticus;
Bromus inermis;
Chloris gayana;
Dactylis glomerata;
Digitaria smutsii;
Ehrharta calycina;
Eragrostis curvula;
Eragrostis tef;
Festuca arundinacea;

Festuca pratensis (F. *elatior*);
Festuca rubra;
Festuca rubra var. *commutata*;
Lolium multiflorum;
Lolium perenne;
Lolium loliaceum;
Paspalum dilatatum et *P. urvillei*;
Phalaris arundinacea;
Phalaris tuberosa;
Poa pratense;
Setaria sphacelata;
Sorghum almum;
Sorghum sudanense;

(b) die volgende voe peulgewasse:—

Lespedeza stipulacea Koreaanse lespedeza;
Lupinus albus witlupien;
Lupinus angustifolius bloulupien;
Lupinus luteus geellupien;
Medicago sativa lusern;
Ornithopus sativus serrade la;
Trifolium fragiferum aarbeiklawer;
Trifolium incarnatum inkarnaatklawer;
Trifolium pratense rooiklawer;
Trifolium repens witklawer;
Trifolium repens var. *latum* ladino-witklawer;
Trifolium subterraneum ondergrondse klawer;
Vicia sativa gewone wieke;
Vicia villosa harige wieke;

(c) die volgende weidingskruid:—

Atriplex semi-baccata kruipsoutbos;

(d) die volgende akkerbougewasse:—

Beta vulgaris var. *macrorrhiza* mangelwortel;
Brassica campestris koolraap;
Brassica napus var. *biennis* weikool;
Brassica oleracea var. *acephala* beeskool Chou
 Moe lier, 1,000-headed, ens.);
Brassica rapa beesraap;
Raphanus sativus Japanese radys;

(e) die volgende groentegewasse:—

Allium cepa ui;
Allium porrum prei;
Beta vulgaris var. *cicla* spinasiebeet;
Beta vulgaris var. *hortensis* tuinbeet;
Brassica oleracea var. *botrytis* broccoli;
Brassica oleracea var. *botrytis* blomkool;
Brassica oleracea var. *capitata* kopkool;
Brassica oleracea var. *caulorapa* kohlrabi;
Brassica oleracea var. *gemmifera* Brusselse
 spruitjies;
Brassica rapa raap;
Cichorium endivia andywie;
Citrullus vulgaris waatlemoen;
Cucumis melo spanspek;
Cucumis sativa komkommer;
Cucurbita moschata, *C. maxima* et *C. pepo*
 skorsie en pampoens;
Daucus carota wortel;
Lactuca sativa blaarslaai;
Lycopersicon esculentum tomatie;
Pastinaca sativa witwortel;
Phaseolus vulgaris stamboom;
Phaseolus vulgaris rankboom;
Pisum sativum ert;
Raphanus sativus radys;
Solanum melongena var. *esculentum* eiervrug;
Vicia faba boerboon;
Zea mays var. *saccharata* suikermielie;

Festuca pratensis (F. *elatior*);
Festuca rubra;
Festuca rubra var. *commutata*;
Lolium multiflorum;
Lolium perenne;
Lolium loliaceum;
Paspalum dilatatum et *P. urvillei*;
Phalaris arundinacea;
Phalaris tuberosa;
Poa praeensis;
Setaria sphacelata;
Sorghum almum;
Sorghum sudanense;

(b) the following forage legumes:—

Lespedeza stipulacea Korean Lespedeza;
Lupinus albus white lupin;
Lupinus angustifolius blue lupin;
Lupinus luteus yellow lupin;
Medicago sativa lucerne (alfalfa);
Ornithopus sativus Serradella;
Trifolium fragiferum strawberry clover;
Trifolium incarnatum crimson clover;
Trifolium pratense red clover;
Trifolium repens white clover;
Trifolium repens var. *latum* ladino clover;
Trifolium subterraneum subterranean clover;
Vicia sativa common vetches;
Vicia villosa hairy vetches;

(c) the following pasture herbs:—

Atriplex semi-baccata creeping saltbush;

(d) the following field crops:—

Beta vulgaris var. *macrorrhiza* mangel beet;
Brassica campestris cattle Swede;
Brassica napus var. *biennis* rape;
Brassica oleracea var. *acephala* kale (Chou
 Moellier, 1000-headed, etc.);
Brassica rapa cattle turnip;
Raphanus sativus Japanese radish;

(e) the following vegetables:—

Allium cepa onion;
Allium porrum leek;
Beta vulgaris var. *cicla* spinach beet;
Beta vulgaris var. *hortensis* beet, garden;
Brassica oleracea var. *botrytis* broccoli;
Brassica oleracea var. *botrytis* cauliflower;
Brassica oleracea var. *capitata* cabbage;
Brassica oleracea var. *caulorapa* kohlrabi;
Brassica oleracea var. *gemmifera* Brussels
 sprouts;
Brassica rapa turnip;
Cichorium endivia endive;
Citrullus vulgaris watermelon;
Cucumis melo muskmelon;
Cucumis sativus cucumber;
Cucurbita moschata, *C. maxima* et *C. pepo*
 squash and pumpkin;
Daucus carota carrot;
Lactuca sativa lettuce;
Lycopersicon esculentum tomato;
Pastinaca sativa parsnip;
Phaseolus vulgaris bean, garden, dwarf;
Phaseolus vulgaris bean, garden, runner;
Pisum sativum pea;
Raphanus sativus radish;
Solanum melongena var. *esculentum* eggplant;
Vicia faba broadbean;
Zea mays var. *saccharata* sweetcorn;

„vooraf verpakte saad”, saad deur Suid-Afrikaanse verpakkers in spesiaal-ontwerpte en gedrukte pak-kies, kartonne, sakke, blikke of ander soort houers verpak, waarop die naam en adres van die verpak-ker voorkom, hetsy per gewig verkoop of nie;
 „volledige rekord”, ’n geskrewe rekord wat alle inlig-ting bevat in verband met ’n saadlot, die identifi-kasie, oorsprong, soort, variëteit, suiwerheids- en ontkiemingsontledings, verpakkingskodenommer en hoeveelheid daarvan; en
 „die Wet”, die Wet op Misstawwe, Veevoedsel, Saad en Middels, 1947 (Wet No. 36 van 1947).

“pre-packed seed” means seed packed by South African packers into specially designed and printed packets, cartons, bags, tins or other kind of con-tainers, bearing the name and address of the packer, whether sold by weight or not;
 “complete record” means a written record of all information pertaining to a lot of seed, its identifi-cation, origin, kind, variety, purity and germination analyses, packing code number and quantity; and
 “the Act” means the Fertilizers, Farm Feeds, Seeds and Remedies Act, 1947 (Act No. 36 of 1947).

SAADHOUERVEREISTES.

2. Houers waarin saad verkoop word, moet heel en skoon wees.

MERK VAN SAADHOUERS.

3. (1) Houers waarin saad verkoop word, moet of gemerk of geëtiketeer wees met die volgende inligting in Afrikaans en/of Engels in enige vorm wat goed leesbaar is:—

- (a) Die naam en adres van die verkoper, of in die geval van vooraf verpakte saad, die naam en adres van die verpakker op voorwaarde dat die saad in die oorspronklike onopgemaakte houers verkoop word;
- (b) die naam van die soort en variëteit van die saad, waarvan die benaming beperk moet wees tot die erkende naam van die soort en variëteit;
- (c) suiwerheids- en ontkiemingspersentasies—
 - (i) die bewoording „Standaardgraad”, as die saad voldoen aan die suiwerheids- en ontkiemingspersentasies soos voorgeskryf in die Eerste Aanhangsel hiervan;
 - (ii) die suiwerheids- en ontkiemingspersentasies indien een of albei sodanige persentasies minder is as dié in die Eerste Aanhangsel hiervan voorgeskryf word; met dien verstande dat geen breuke of desimaalsyfers gebruik mag word nie;
- (d) 'n Verpakkingskodenommer wat ooreenstem met die inskrywing in die volledige rekord waarvan in regulasie 9 melding gemaak word;
- (e) die maand en jaar waarin die ontkieming van die saad bepaal is.

(2) Subparagrafe (c), (d) en (e) van subregulasie (1) is nie van toepassing op die verkoop van saad in kommersiële saadpakkies, wat nie per gewig verkoop word nie.

(3) Subparagrafe (c) en (e) van subregulasie (1) is nie van toepassing op individuele verkope van die volgende of kleiner gewigte nie:—

- (i) Voergrasse..... 10 pond.
- (ii) Voerpeulgewasse..... 10 pond.
- (iii) Weidingskruid..... 5 pond.
- (iv) Akkerbougewasse..... 5 pond.
- (v) Groentegewasse:—

- (a) Bone (stam-, rank- en boerbone)..... 5 pond.
- (b) Erte..... 5 pond.
- (c) Suikermielies..... 5 pond.
- (d) *Brassica* (blomkool, broccoli, Brusselse spruitjies, koolkool)..... 4 ons.
- (e) Tamaties..... 4 ons.
- (f) Ander groente..... 1 pond.

(4) Wanneer saad behandel is met 'n stof wat 'n giftige bestanddeel bevat, moet die bewoording „Behandel met 'n giftige middel—Treated with a poisonous substance” op 'n opvallende wyse gedruk word op die houer of op 'n etiket wat daaraan geheg is.

(5) Geen ander bewoording of merke mag op die houers waarin saad verkoop word, voorkom, uitgesonderd dié wat direk betrekking het op die inhoud van sodanige houers. Erkende, gevestigde of geregistreerde handelsmerke van verkopers kan op die houers verskyn.

(6) (a) Die bewoording „Gesertifiseerde saad” en/of sertifikaatnommers kan aangebring word op houers waarin saad verkoop word, of op etikette wat daaraan geheg is, op voorwaarde dat die naam van die land of staat waar die saad verbou en gesertifiseer is, bygevoeg word, bv. „Suid-Afrikaanse gesertifiseerde saad” en voorts op voorwaarde dat die verkoper oor geskrewe bewyse beskik dat die saad gesertifiseer is deur 'n erkende sertifiseringsowerheid in die land van oorsprong.

(b) Die bewoording „Gesertifiseerde saad” en/of sertifikaatnommers mag nie aangebring word op kommersiële saadpakkies wat nie per gewig verkoop word nie.

4. Niemand mag saad verkoop as die tydperk tussen die laaste dag van die maand ooreenkomstig paragraaf (e) van subregulasie (1) van regulasie 3 aangebring op die houer waarin dit verkoop word of op 'n etiket wat daaraan geheg is, en die datum van verkoop daarvan langer as twaalf maande is nie.

SEED CONTAINER REQUIREMENTS.

2. Containers in which seed is sold shall be sound and clean.

MARKING OF SEED CONTAINERS.

3. (1) Containers in which seed is sold shall be either labelled or branded with the following information in English and/or Afrikaans in any form that is clearly legible:—

- (a) The name and address of the seller, or in the case of pre-packed seed, the name and address of the packer, provided the seed is sold in the original unopened container;
- (b) the name of the kind and variety of the seed, the representation of which shall be confined to the recognised name of the kind and variety;
- (c) purity and germination percentages—
 - (i) the wording “Standard Grade” if the seed conforms to the purity and germination percentages prescribed in the First Annexure hereto;
 - (ii) the purity and germination percentages, if one or both of such percentages are less than those prescribed in the First Annexure hereto; provided that no fractions or decimals shall be used;
- (d) a packing code number which shall correspond with the entry in the complete record as referred to in regulation 9;
- (e) the month and the year during which the germination of the seed was determined.

(2) Sub-paragraphs (c), (d) and (e) of sub-regulation (1) shall not apply to the sale of seed in commercial seed packets not sold by weight.

(3) Sub-paragraphs (c) and (e) of sub-regulation (1) shall not apply to individual sales of the following or lesser weights:—

- (i) Forage grasses..... 10 lb.
- (ii) Forage legumes..... 10 lb.
- (iii) Pasture herbs..... 5 lb.
- (iv) Field crops..... 5 lb.
- (v) Vegetables:—

- (a) Beans (bush, runner and broad-beans)..... 5 lb.
- (b) Peas..... 5 lb.
- (c) Sweetcorn..... 5 lb.
- (d) *Brassica* (broccoli, Brussels sprouts, cabbage, cauliflower) 4 ozs.
- (e) Tomato..... 4 ozs.
- (f) Other vegetables..... 1 lb.

(4) Where seed has been treated with a substance containing a poisonous element, the wording “Treated with a poisonous substance—Behandel met 'n giftige middel” shall be printed in a conspicuous manner on the container or on the label attached thereto.

(5) No other wording or marks shall appear on containers in which seed is sold except those having a direct relation to the contents of such containers. Recognised, established or registered trade marks of sellers shall be permitted to appear on containers.

(6) (a) The wording “Certified Seed” and/or certificate numbers may be used on containers in which seed is sold or on labels attached thereto provided the name of the country or state where the seed was grown and certified, is affixed thereto, e.g. “South African certified seed” and provided further that the seller is in possession of written proof that the seed has been certified by a recognised certification authority in the country of origin.

(b) The wording “Certified Seed” and/or certificate numbers may not appear on commercial seed packets nor sold by weight.

4. No person shall sell any seed if the period between the last day of the month, marked in terms of paragraph (e) of sub-regulation (1) of regulation 3 on the container in which it is sold or on the label attached thereto, and the date of sale thereof exceeds twelve months.

ONKRUIDSAAD IN SAAD.

5. (1) Saad mag nie verkoop word indien dit meer as 50 (vyftig) onkruidsaad per ons saad, of meer as 0.5 per sent per gewig van die saad bevat nie.

(2) Saad mag nie verkoop word indien dit dodder (*Cuscuta* spp.) bevat nie.

INVOER VAN SAAD.

6. (1) Saad mag nie in Suid-Afrika ingevoer word nie tensy dit voldoen aan die minimum vereistes vir suiwerheid, ontkieming en die gehalte lewende saad soos voorgeskryf in die Eerste Aanhangsel hiervan. Saad word vir invoer gelos op grond van die suiwerheids- en ontkiemingsyfers wat op die fakture van die verskaffer aangedui word, op voorwaarde dat sodanige syfers vergesel gaan van 'n getekende verklaring deur 'n verantwoordelike beampte van die verskaffer dat die suiwerheid- en ontkiemingsyfers wat op die saadlot betrekking het, bepaal is volgens die reëls van die Internasionale Saadtoetsvereniging.

(2) Saad mag nie in Suid-Afrika ingevoer word as die invoer daarvan in ander lande geweier is nie, op voorwaarde dat enige sodanige saad wat in Suid-Afrika verbou is, na Suid-Afrika teruggestuur mag word.

TOELAATBARE AFWYKING.

7. Die suiwerheids- en ontkiemingspersentasies deur die ontleder verkry by die ontleding van die monster kan afwyk van die persentasies deur die verkoper aangedui op die houer(s) waaruit die monster geneem is of op 'n etiket wat daaraan geheg is, mits sodanige afwyking nie meer as die volgende persentasies is nie:—

(a) In die geval van die suiwerheid, die persentasie bereken volgens die volgende formule:—

$$\text{Toelaatbare afwyking (T)} = 0.6 + \left(0.2 \times \frac{pxq}{100} \right)$$

waar p die persentasie suiwer saad en q die totale persentasie onaktiewe stof, onkruidsaad en ander gewassade is.

(i) Hierdie formule is van toepassing op alle sade, uitgesonderd spesies van *Agrostis*, *Bromus*, *Chloris*, *Dactylis*, *Digitaria*, *Ehrharta*, *Festuca*, *Paspalum*, *Poa* en *Setaria* en mengsels wat uit meer as 50 persent van hierdie soorte gesamentlik of afsonderlik bestaan.

(ii) In die geval van *Agrostis*, *Bromus*, *Chloris*, *Dactylis*, *Digitaria*, *Ehrharta*, *Festuca*, *Paspalum*, *Poa* en *Setaria* en mengsels wat uit meer as 50 persent van hierdie soorte gesamentlik of afsonderlik bestaan, word 'n addisionele afwyking toegelaat. Die addisionele afwyking (T) word verkry deur die gereelde afwyking te vermenigvuldig met die minste van p en q en te deel deur 100.

(b) In die geval van die ontkieming, die persentasie in die volgende tabel gespesifiseer:—

Ontkiemingsreeks (persentasie).	Toelaatbare afwyking (persentasie).
97-100.....	4
95-96.....	5
90-94.....	6
80-89.....	7
70-79.....	8
60-69.....	9
Onder 60.....	10

VERKLARINGS IN ADVERTENSIES VAN SAAD.

8. (1) Geen woorde, handelsmerk, illustrasies of prente wat strydig is met of 'n valse of misleidende indruk ten opsigte van die geskiedenis, oorsprong of kwaliteit van saad kan skep, mag in enige advertensie van saad gebruik word nie.

(2) Die woord „gesertifiseer” mag nie in enige advertensie gebruik word nie, tensy die verkoper oor geskrewe bewyse beskik dat die saad waarop die advertensie betrekking het, deur 'n erkende sertifiseringsowerheid gesertifiseer is.

WEED SEED IN SEED.

5. (1) Seed shall not be sold if it contains weed seed in excess of 50 (fifty) per ounce of seed or more than 0.5 per cent by weight of the seed.

(2) Seed shall not be sold if it contains dodder (*Cuscuta* spp.).

IMPORTATION OF SEED.

6. (1) Seed shall not be imported into South Africa unless it conforms to the minimum requirements for purity, germination and live seed content as prescribed in the First Annexure hereto. Seed shall be released for importation on the strength of the purity and germination figures indicated on supplier's invoice, provided such figures are accompanied by a signed declaration of a responsible officer of the supplier that the purity and germination figures in respect of the seed lot have been determined according to the rules of the International Seed Testing Association.

(2) Seed shall not be imported into South Africa if its importation into any other country has been refused; provided that any such seed which was grown in South Africa may be returned to South Africa.

TOLERANCE.

7. The purity and germination percentages obtained by the analyst on the sample analysed may deviate from the percentages indicated by the seller on the container(s) from which the sample has been drawn or on the label attached thereto, provided such deviation does not exceed:—

(a) In the case of purity, the percentage calculated according to the following formula:—

$$\text{Tolerance (T)} = 0.6 + \left(0.2 \times \frac{pxq}{100} \right)$$

where p is the percentage of pure seed and q is the total percentage of inert matter, weed seed and other crop seeds.

(i) This formula shall apply to all seeds excepting species of *Agrostis*, *Bromus*, *Chloris*, *Dactyles*, *Digitaria*, *Ehrharta*, *Festuca*, *Paspalum*, *Poa* and *Setaria* and mixtures containing these kinds singly or combined in excess of 50 per cent.

(ii) In the case of *Agrostis*, *Bromus*, *Chloris*, *Dactylis*, *Digitaria*, *Ehrharta*, *Festuca*, *Paspalum*, *Poa* and *Setaria* and mixtures containing these kinds singly or combined in excess of 50 per cent, an additional tolerance shall be allowed. The additional tolerance (T) shall be obtained by multiplying the regular tolerance by the lesser of p and q and dividing by 100.

(b) In the case of germination, the percentage specified in the following table:—

Range of Germination (Per cent).	Permissible Tolerance (Per cent).
97 to 100.....	4
95 to 96.....	5
90 to 94.....	6
80 to 89.....	7
70 to 79.....	8
60 to 69.....	9
Below 60.....	10

STATEMENTS IN ADVERTISEMENTS OF SEED.

8. (1) No words, brand marks, illustrations or pictures which are contradictory to or may give a false or misleading impression as to the history, origin or quality of seed shall be used in any advertisement of seed.

(2) The word “certified” may not be used in any advertisement unless the seller is in possession of written proof that the seed to which the advertisement relates has been certified by a recognised certification authority.

HOU VAN VOLLEDIGE REKORDS.

9. (1) Iedereen wat saad verkoop, moet vir 'n tydperk van drie jaar 'n volledige rekord hou van elke lot saad wat gehanteer is.

(2) Geen volledige rekord hoef van vooraf verpakte saad gehou te word nie mits die saad verkoop word in die oorspronklike, onoorgemaakte houer soos dit van die verpakker ontvang is, en voorts op voorwaarde dat die verpakker 'n volledige rekord van sodanige vooraf verpakte saad gehou het.

MONSTERNEMING EN TOETS VAN SAAD.

10. (1) Monsterneming en toets van saad ingevolge hierdie regulasies moet uitgevoer word volgens die voorskrifte in die Tweede Aanhangel hiervan vervat.

(2) Die sertifikaat van die inspekteur of beamppte wat die monster neem, soos by subartikel (2) van artikel vyftien van die Wet vereis, moet in die vorm wees soos in die Derde Aanhangel hiervan voorgeskryf.

(3) Die sertifikaat wat die resultaat van die ontleding of toets van 'n monster aangee, soos by subartikel (3) van artikel vyftien van die Wet vereis, moet in die vorm wees soos in die Vierde Aanhangel hiervan voorgeskryf.

OORTREDINGS EN STRAFBEPALINGS.

11. Iedereen wat 'n bepaling of vereiste van hierdie regulasies oortree of versuim om daaraan te voldoen, begaan 'n misdryf en is strafbaar met 'n boete van hoogstens vyftig pond of gevangenisstraf vir 'n tydperk van hoogstens ses maande, of met sodanige boete sowel as sodanige gevangenisstraf.

12. Hierdie regulasies vervang die regulasies afgekonddig by Goewermentskennisgewing No. 1214 van 1948.

EERSTE AANHANGSEL.

MINIMUM VEREISTES VIR STANDAARDGRAADSAAD EN INGEVOERDE SAAD.

	Suiwerheids-persentasie minstens	Ontkiemings-persentasie minstens	* Gehalte lewende saad minstens %
(a) Voergrasse:—			
<i>Agrostis alba</i>	90	70	—
<i>Bromus catharticus</i>	85	75	—
<i>Bromus inermis</i>	85	75	—
<i>Chloris gayana</i>	—	—	25
<i>Dactylis glomerata</i>	90	70	—
<i>Digitaria smutsii</i>	—	—	25
<i>Ehrharta calycina</i>	—	—	25
<i>Eragrostis curvula</i>	96	70	—
<i>Eragrostis tef</i>	96	80	—
<i>Festuca arundinacea</i>	96	75	—
<i>Festuca pratensis</i> (F. elatior).....	96	70	—
<i>Festuca rubra</i>	90	70	—
<i>Festuca rubra</i> var. <i>commutata</i>	96	70	—
<i>Lolium multiflorum</i>	96	80	—
<i>Lolium perenne</i>	96	80	—
<i>Lolium loliaceum</i>	96	80	—
<i>Paspalum dilatatum</i> et <i>P. urvillei</i>	—	—	25
<i>Phalaris arundinacea</i>	97	50	—
<i>Phalaris tuberosa</i>	97	60	—
<i>Poa pratensis</i>	85	70	—
<i>Setaria sphacelata</i>	—	—	25
<i>Sorghum alnum</i>	96	70	—
<i>Sorghum sudanense</i>	96	70	—
(b) Voerpeulgewasse:—			
<i>Lespedeza stipulacea</i> Koreaanse lespedeza.....	97	70	—
† <i>Lupinus albus</i> witlupien..	98	75	—
<i>Lupinus angustifolius</i> blou-lupien.....	98	75	—
† <i>Lupinus luteus</i> geellupien..	98	75	—
<i>Medicago sativa</i> lusern...	98	90	—

* Die gehalte lewende saad word bepaal deur die suiwerheids-persentasie met die ontkiemingspersentasie te vermenigvuldig en dan deur 100 te deel.

† By soetlupine mag nie meer as 4 persent van die sade alkaloid, bereken op 'n tellingsbasis, bevat nie.

KEEPING OF RECORDS OF SEED.

9. (1) Every person selling seed, shall keep for a period of three years a complete record of each lot of seed handled.

(2) No complete record need be kept of pre-packed seed provided the seed is sold in the original unopened container as received from the packer and provided further that the packer has kept the complete records of such pre-packed seed.

SAMPLING AND TESTING OF SEED.

10. (1) Sampling and testing of seed under these regulations shall be carried out in accordance with the prescriptions contained in the Second Annexure hereto.

(2) The certificate of the inspector or officer taking the sample of seed, as required by sub-section (2) of section fifteen of the Act, shall be in the form prescribed in the Third Annexure hereto.

(3) The certificate stating the result of the analysis or test of a sample, as required by sub-section (3) of section fifteen of the Act, shall be in the form prescribed in the Fourth Annexure hereto.

OFFENCES AND PENALTIES.

11. Any person who contravenes or fails to comply with an provision or requirement of these regulations shall be guilty of an offence and liable to a fine not exceeding fifty pounds, or imprisonment for a period not exceeding six months, or to both such fine and such imprisonment.

12. These regulations are substituted for the regulations, published by Government Notice No. 1214 of 1948.

FIRST ANNEXURE.

MINIMUM REQUIREMENTS FOR STANDARD GRADE SEED AND IMPORTED SEED.

	Purity Percentage not less than	Germination Capacity Percentage not less than	* Live Seed Content not less than %
(a) Forage Grasses:—			
<i>Agrostis alba</i>	90	70	—
<i>Bromus catharticus</i>	85	75	—
<i>Bromus inermis</i>	85	75	—
<i>Chloris gayana</i>	—	—	25
<i>Dactylis glomerata</i>	90	70	—
<i>Digitaria smutsii</i>	—	—	25
<i>Ehrharta calycina</i>	—	—	25
<i>Eragrostis curvula</i>	96	70	—
<i>Eragrostis tef</i>	96	80	—
<i>Festuca arundinacea</i>	96	75	—
<i>Festuca pratensis</i> (F. elatior).....	96	70	—
<i>Festuca rubra</i>	90	70	—
<i>Festuca rubra</i> var. <i>commutata</i>	96	70	—
<i>Lolium multiflorum</i>	96	80	—
<i>Lolium perenne</i>	96	80	—
<i>Lolium loliaceum</i>	96	80	—
<i>Paspalum dilatatum</i> et <i>P. urvillei</i>	—	—	25
<i>Phalaris arundinacea</i>	97	50	—
<i>Phalaris tuberosa</i>	97	60	—
<i>Poa pratensis</i>	85	70	—
<i>Setaria sphacelata</i>	—	—	25
<i>Sorghum alnum</i>	96	70	—
<i>Sorghum sudanense</i>	96	70	—
(b) Forage Legumes:—			
<i>Lespedeza stipulacea</i> Lespedeza, Korean.....	97	70	—
† <i>Lupinus albus</i> Lupin, white.....	98	75	—
<i>Lupinus angustifolius</i> Lupin, blue.....	98	75	—
† <i>Lupinus luteus</i> Lupin, yellow.....	98	75	—
<i>Medicago sativa</i> Lucerne (Alfalfa).....	98	90	—

* Live seed content shall be determined by multiplying the purity percentage and the germination percentage and dividing by 100.

† With sweet lupins not more than 4 per cent of the seed may contain alkaloid calculated on a count basis.

	Suiwerheids- persentasie minstens	Ont- kiemings- persentasie minstens	* Gehalte lewendende saad minstens %		Purity Percentage not less than	Germi- nation Capacity Percentage not less than	* Live Seed Content not less than %
<i>Ornithopus sativus</i> serra- della.....	96	70	—	<i>Ornithopus sativus</i> Serra- della.....	96	70	—
<i>Trifolium fragiferum</i> aar- beiklawer.....	97	80	—	<i>Trifolium fragiferum</i> Clo- ver, strawberry.....	97	80	—
<i>Trifolium incarnatum</i> in- karnaatklawer.....	97	75	—	<i>Trifolium incarnatum</i> Clo- ver, crimson.....	97	75	—
<i>Trifolium pratense</i> rooikla- wer.....	97	75	—	<i>Trifolium pratense</i> Clover, red.....	97	75	—
<i>Trifolium repens</i> witklawer	97	80	—	<i>Trifolium repens</i> Clover, white.....	97	80	—
<i>Trifolium repens</i> var. <i>latum</i>				<i>Trifolium repens</i> var. <i>latum</i>			
ladino-witklawer.....	97	80	—	Clover, ladino.....	97	80	—
<i>Trifolium subterraneum</i> on- dergrondse klawer.....	97	75	—	<i>Trifolium subterraneum</i>			
<i>Vicia sativa</i> gewone wieke	98	80	—	Clover, subterranean...	97	75	—
<i>Vicia villosa</i> harige wieke	98	80	—	<i>Vicia sativa</i> Vetches, com- mon.....	98	80	—
Harde sade: In die geval van lusernseed mag tot 40 persent harde sade as ontkiemde sade bygetel word. In die geval van ander voerpeulgewasse mag tot 15 persent harde sade bygetel word.				<i>Vicia villosa</i> Vetches, hairy	98	80	—
(c) Weidingskruid:—				Hard seeds: In the case of lucerne seed up to 40 per cent hard seeds may be counted in as germinated seeds. In the case of other forage legumes up to 15 per cent may be counted in.			
<i>Atriplex semi-baccata</i> krui- pende soutbos.....	—	—	25	(c) Pasture Herbs:—			
(d) Akkerbougewasse:—				<i>Atriplex semi-baccata</i> Salt- bush, creeping.....	—	—	25
<i>Beta vulgaris</i> var. <i>macror-</i> <i>hiza</i> mangelwortel....	97	70	—	(d) Field Crops:—			
<i>Brassica campestris</i> kool- raap.....	98	75	—	<i>Beta vulgaris</i> var. <i>macror-</i> <i>hiza</i> Beet, mangel....	97	70	—
<i>Brassica napus</i> var. <i>biennis</i> weikool.....	98	75	—	<i>Brassica campestris</i> Cattle Swede.....	98	75	—
<i>Brassica oleracea</i> var. <i>ace-</i> <i>phala</i> beeskool (Chou Moellier, 1,000-headed, ens.).....	98	75	—	<i>Brassica napus</i> var. <i>bien-</i> <i>nis</i> Rape.....	98	75	—
<i>Brassica rapa</i> beesraap...	98	75	—	<i>Brassica oleracea</i> var. <i>ace-</i> <i>phala</i> Kale (Chou Moel- lier, 1000-headed, etc.)	98	75	—
<i>Raphanus sativus</i> Japanese radys.....	98	75	—	<i>Brassica rapa</i> Cattle Tur- nip.....	98	75	—
(e) Groentegewasse:—				<i>Raphanus sativus</i> Japanese Radish.....	98	75	—
<i>Allium cepa</i> ui.....	98	70	—	(e) Vegetables:—			
<i>Allium porrum</i> prei.....	98	65	—	<i>Allium cepa</i> Onion.....	98	70	—
<i>Beta vulgaris</i> var. <i>cicla</i> spi- nasiebeet.....	97	75	—	<i>Allium porrum</i> Leek.....	98	65	—
<i>Beta vulgaris</i> var. <i>hortensis</i> tuinbeet.....	97	75	—	<i>Beta vulgaris</i> var. <i>cicla</i> Beet, spinach.....	97	75	—
<i>Brassica oleracea</i> var. <i>bot-</i> <i>rytis</i> broccoli.....	98	75	—	<i>Beta vulgaris</i> var. <i>hortensis</i> Beet, garden.....	97	75	—
<i>Brassica oleracea</i> var. <i>bot-</i> <i>rytis</i> blomkool.....	98	75	—	<i>Brassica oleracea</i> var. <i>bot-</i> <i>rytis</i> Broccoli.....	98	75	—
<i>Brassica oleracea</i> var. <i>cap-</i> <i>itata</i> kopkool.....	98	75	—	<i>Brassica oleracea</i> var. <i>bot-</i> <i>rytis</i> Cauliflower.....	98	75	—
<i>Brassica oleracea</i> var. <i>cau-</i> <i>lorapa</i> kohlrabi.....	98	75	—	<i>Brassica oleracea</i> var. <i>cap-</i> <i>itata</i> Cabbage.....	98	75	—
<i>Brassica oleracea</i> var. <i>gem-</i> <i>mifera</i> Brusselse sprui- tjies.....	98	75	—	<i>Brassica oleracea</i> var. <i>cau-</i> <i>lorapa</i> Kohlrabi.....	98	75	—
<i>Brassica rapa</i> raap.....	97	80	—	<i>Brassica oleracea</i> var. <i>gem-</i> <i>mifera</i> Brussels Sprouts	98	85	—
<i>Cichorium endivia</i> andywie	95	70	—	<i>Brassica rapa</i> Turnip....	97	80	—
<i>Citrullus vulgaris</i> waatie- moen.....	98	75	—	<i>Cichorium endivia</i> Endive	95	70	—
<i>Cucumis melo</i> spanspek..	98	80	—	<i>Citrullus vulgaris</i> Water- melon.....	98	75	—
<i>Cucumis sativus</i> komkom- mer.....	98	80	—	<i>Cucumis melo</i> Muskmelon	98	80	—
<i>Cucurbita moschata</i> , <i>C.</i> <i>maxima</i> et <i>C. pepo</i> skor- sie en pampoen.....	98	75	—	<i>Cucumis sativus</i> Cucumber	98	80	—
<i>Daucus carota</i> wortel....	98	75	—	<i>Cucurbita moschata</i> , <i>C.</i> <i>maxima</i> et <i>C. pepo</i>			
<i>Lactuca sativa</i> blaarslaai.	97	65	—	Squash and pumpkin..	98	75	—
<i>Lycopersicon esculentum</i> tamatie.....	97	75	—	<i>Daucus carota</i> Carrot....	98	75	—
<i>Pastinaca sativa</i> witwortel	96	50	—	<i>Lactuca sativa</i> Lettuce...	97	65	—
<i>Phaseolus vulgaris</i> stam- boon.....	98	75	—	<i>Lycopersicon esculentum</i> Tomato.....	97	75	—
<i>Phaseolus vulgaris</i> rank- boon.....	98	75	—	<i>Pastinaca sativa</i> Parsnip..	96	50	—
<i>Pisum sativum</i> ert.....	98	80	—	<i>Phaseolus vulgaris</i> Bean, garden dwarf.....	98	75	—
<i>Raphanus sativus</i> radys...	98	75	—	<i>Phaseolus vulgaris</i> Bean, garden, runner.....	98	75	—
<i>Solanum melongena</i> var. esculentum eiervrug....	98	60	—	<i>Pisum sativum</i> Pea.....	98	80	—
<i>Vicia faba</i> boerboon.....	98	75	—	<i>Raphanus sativus</i> Radish..	98	75	—
<i>Zea mays</i> var. <i>saccharata</i> suikermielie.....	97	80	—	<i>Solanum melongena</i> var. esculentum Eggplant...	98	60	—
				<i>Vicia faba</i> Broadbean....	98	75	—
				<i>Zea mays</i> var. <i>saccharata</i> Corn, sweet.....	97	80	—

* Die gehalte lewendende saad word bepaal deur die suiwerheids-
persentasie met die ontkiemingspersentasie te vermenigvuldig en
dan deur 100 te deel.

* Live seed content shall be determined by multiplying the
purity percentage and the germination percentage and dividing by
100.

TWEDE AANHANGSEL.

MONSTERNEMING EN MONSTERS.

1. Ten einde 'n verteenwoordigende monster van saad te verkry, moet die inspekteur of beampte as volg te werk gaan:—

- (1) Monsters van vry vloeiende saad in toe of oop sakke moet geneem word met 'n saksteker of saadbuis wat lank genoeg is om alle dele van die sak te bereik en nie die saad sal beskadig nie. Ongeveer gelyke hoeveelhede saad moet geneem word naby die bek, middel en bodem van elke sak wat getoets word.
- (2) In die geval van saad wat nie vry vloei nie en wat in sakke of ander houers verpak is, en waarvan monsters met 'n saksteker of saadbuis moeilik geneem kan word, kan die monster geneem word deur die hand in die saad te steek en verteenwoordigende gedeeltes daarvan uit te haal.
- (3) In die geval van saad wat in sakke verpak is, moet—
 - (a) uit elke sak monsters geneem word as die lot uit drie sakke of minder bestaan;
 - (b) uit elke derde sak monsters geneem word, maar nooit minder as drie nie as die lot uit meer as drie sakke, maar uit hoogstens 30 sakke bestaan;
 - (c) uit elke vyfde sak moet monsters geneem word, maar nooit minder as tien sakke nie, as die lot uit meer as 30 sakke bestaan.
- (4) (a) Van groot lotte in blikke of ander soortgelyke houers, moet monsters geneem word deur gedeeltes van minstens sewe eweredig verspreide dele van die hoeveelheid waarvan monsters uit te haal.
- (b) Wanneer monsters van groot lotte wat in hope verpak is, geneem word, moet 'n monster verkry word deur gedeeltes deur middel van 'n saksteker of saadbuis wat lank genoeg is om die middel van die hoop te bereik, van op tien tot twintig plekke naby die rand, by die middel en onder in die hoop uit te haal.
- (5) Wanneer monsters gedurende die skoonmaakproses geneem word, moet 'n monster by gereelde tussenposes uit die saadstroom geneem word, terwyl die saad die skoonmaaktoestel verlaat, mits die houer wat gebruik word om die monster te neem so gemaak is dat eweredige monsters van die hele deursnitvlak van die saadstroom geneem word, en dat die saad wat daar ingaan, nie weer kan uitspring nie.
- (6) (a) Ten einde die groot monster te verminder, moet die gedeeltes wat uit verskillende sakke of gedeeltes van lotte verkry is, op 'n harde, gelyk oppervlakte geplaas word en nadat dit goed gemeng is, uitgesprei en, indien nodig, in kwarte verdeel word. Vir hierdie doel word die teenoorgestelde kwarte weggelaat. Hierdie proses kan herhaal word totdat die gewenste hoeveelheid verkry is. Die gebruik van 'n meganiese verdeler vir die vermindering van die groot monster word ook toegelaat. Die monster aldus verkry, word dan in naastebly drie gelyke gedeeltes verdeel waarvan elk minstens soveel weeg as wat in subartikel (b) van artikel 6 van hierdie Aanhangsel vir die betrokke saad gespesifiseer word.
- (b) Die gewig van elke monster moet minstens die volgende wees:—
 - 1,500 gram*—vir grootsadige boonvariëteite en saad van gelyke grootte;
 - 1,000 gram—vir bone, erte, graansoorte en ander saad van gelyke grootte;
 - 200 gram—vir beet en ander saad van gelyke grootte;

* 1 ons = 28.3 gram.

SECOND ANNEXURE.

SAMPLING AND SAMPLES.

1. In order to obtain a representative sample of seed, the inspector or officer shall proceed as follows:—

- (1) Free-flowing seed in bags, closed or open, shall be sampled with a probe or trier, long enough to reach all areas in the bag and which will not damage the seed. Approximately equal amounts of seed shall be taken from near the top, middle and bottom of each bag sampled.
- (2) In the case of non-free-flowing seed which is packed in bags or other containers and which is difficult to sample with a probe or trier, the sample shall be drawn by thrusting the hand into the seed and withdrawing representative portions.
- (3) In the case of seed in bags—
 - (a) each bag shall be sampled, if the lot consists of three bags or less;
 - (b) every third bag shall be sampled, but never less than three bags if the lot consists of more than three bags, but not more than 30 bags;
 - (c) every fifth bag shall be sampled, but never less than ten bags if the lot consists of more than 30 bags.
- (4) (a) Bulk lots in bins or other similar containers shall be sampled by withdrawing portions by hand from at least seven uniformly distributed parts of the quantity being sampled.
- (b) When sampling a bulk lot stored in heaps, a sample shall be taken by drawing portions by means of a probe or trier, long enough to reach the centre of the heap from ten to twenty places near the border, middle and bottom of the heap.
- (5) If sampling is done during the cleaning process, a sample shall be drawn at regular intervals from the seed stream while passing from the cleaning plant, provided the container used to draw the sample is of such construction that the entire cross section area of the seed stream is uniformly sampled and the seed entering it cannot bounce out again.
- (6) (a) For the purpose of reducing the bulk sample the portions obtained from different bags or parts of lots shall be placed on a hard, smooth surface and shall, after being thoroughly mixed, be spread out and, if necessary, quartered down. For this purpose the opposing quarters shall be discarded. This process may be repeated until the required quantity is obtained. It shall also be permissible to use a mechanical divider to reduce the bulk sample. The sample so obtained shall then be divided into three approximately equal parts, the weight of each of which shall not be less than specified in sub-section (b) of section 6 of this Annexure.
- (b) Each sample shall be of at least the following weight:—
 - 1,500 grams*—for large-seeded bean varieties and seeds of similar size;
 - 1,000 grams—for beans, peas, cereals and other seeds of similar size;
 - 200 grams—for beet and other seeds of similar size;

* 1 ounce = 28.3 grams.

- 100 gram—vir koolvariëteite, radyse en saad van gelyke grootte;
 50 gram—vir grassoorte, uie, wortels, witwortels, blaarslaai en saad van gelyke grootte;
 30 gram—vir fynsadige groentesade.

(7) Elke monster word dan in 'n aparte, droë houer verpak, en daarmee verder gehandel soos voorgeskryf by subartikel (2) van artikel vyftien van die Wet.

ONTLEDING VAN SAAD.

2. Om die saad te ondersoek, ontleed of te toets, moet die ontleder as volg te werk gaan:—

BEPALING VAN SUIWERHEID.

(1) (a) Om 'n werkmonster vir die suiwerheidsontleding te kry, moet die ontleder die monster wat van die inspekteur of beampte ontvang is, verminder tot naastenby die gewig vir die betrokke saad in Tabel 1 opgegee. Die gewig van die werkmonster in mengsels moet bepaal word deur die soort (of groep soorte van dieselfde grootte) wat die grootste gedeelte van die monster uitmaak. Wanneer daar twee of meer soorte saad met verskillende gewigte is en elkeen in naastenby dieselfde mate aanwesig is, moet die ontleder na sy eie oordeel besluit watter soort of groep die gewig van die monster sal bepaal. Die gewigte in Tabel 1 opgegee, is minima, en die werkmonster kan effens meer weeg as die gespesifiseerde gewig. Geen poging mag aangewend word om die monster tot presies die gespesifiseerde gewig te bring nie.

(b) Om die werkmonster te verkry, word enigeen van die volgende metodes toegelaat:—

(i) *Die ewekansige bakkiemetode.*—'n Skinkbord van gerieflike grootte word gebruik waarop ses tot agt ewe groot bakkes na willekeur geplaas word. Die saad word versigtig uit 'n saadpan oor die oppervlakte van die skinkbord gestrooi terwyl 'n bepaalde patroon gevolg word om 'n gelykmatige verspreiding te bewerkstellig. Eers word in een rigting gestrooi en dan in 'n rigting reghoekig met die eerste. Die saad wat in die klein maathouers opgevang word, word gebruik as die werkmonster of kan nog, indien nodig, ná menging op dieselfde wyse verminder word.

(ii) *Die gemodifiseerde halveringsmetode.*—Die prosedure is dieselfde as die ewekansige bakkiemetode, maar in plaas van ewekansige bakkes word 'n gemodifiseerde skinkbord gebruik wat verdeel is in 'n gelyke getal vierkantige hokkies waarvan elke tweede een bodemloos is. Wanneer die saad oor die skinkbord gestrooi en die skinkbord opgelig word, bly die helfte agter op die pan wat onder die skinkbord geplaas word. Op dié wyse word die monster herhaaldelik in die helfte verdeel totdat 'n monster van die gewenste grootte verkry word.

(iii) *Handmengmetode.*—Die monster word goed gemeng en egalig op 'n plat skinkbord of mengbak gesprei. Nadat die saad uitgesprei is, moet dit nie geskud word alvorens 'n monster daarvan geneem is nie; indien dit gebeur, moet die saad weer gemeng en uitgesprei word. Klein gedeeltes van die saad word dan met 'n lepel van 'n aantal plekke op die skinkbord geneem totdat die gewenste hoeveelheid verkry is. In geen geval moet die aantal lepelmonsters minder as vyf wees nie.

(iv) *Meganiese Verdeling.*

(c) Die werkmonster moet in twee naastenby gelyke gedeeltes verdeel en 'n duplikaatontleding gemaak word. Ingeval die suiwerheidspersentasies met die twee ontledings verkry, verskil met meer as die toelaatbare spelings soos onderskeidelik opgegee in Tabel 2 (a) vir nie-kafagtige en Tabel 2 (b) vir kafagtige saad, moet 'n derde en, indien nodig, 'n vierde ontleding gemaak word.

100 grams—for cabbage varieties, radishes and seeds of similar size;

50 grams—for grasses, onions, carrots, parsnips, lettuce and seeds of similar size;

30 grams—for fine-seeded vegetable seeds.

(7) Each sample shall then be packed in a separate, dry container and further dealt with as prescribed by sub-section (2) of section fifteen of the Act.

ANALYSIS OF THE SEED.

2. In order to examine, analyse and test the seed, the seed analyst shall proceed as follows:—

DETERMINATION OF PURITY.

(1) (a) In order to obtain a working sample for the purity analysis, the seed analyst shall reduce the sample received from the inspector or officer to approximately the weight specified in Table 1 for the seed in question. The weight of the working sample in mixtures shall be determined by the kind (or group of kinds of similar size) which comprises the major proportion of the sample. When there are two or more kinds of seeds having different weights, each present to about the same extent, the analyst shall use his judgment in deciding upon the kind or group which will determine the sample weight.

The weights given in Table 1 are minima and the working sample may weigh slightly more than the weights specified. No attempt shall be made to bring the working sample to exactly the weight specified.

(b) For the purpose of obtaining the working sample any one of the following methods shall be permissible:—

(i) *The Random Cups Method.*—A tray of convenient size is used and on it are placed six to eight cups or small containers of equal size, placed at random over the surface. The seed is shaken gently from a seed pan over the surface of the tray, following a regular pattern to ensure even distribution, first working in one direction and then in a direction at right angles to the first. The seed caught in the small containers is used as the working sample or this may be further reduced, if necessary, in a similar manner after mixing.

(ii) *The Modified Halving Method.*—The procedure is similar to the random cups method, but instead of random cups a modified tray is used, divided into an even number of square compartments, every alternate one of which has no bottom. When the seed is shaken over the tray and the tray is lifted, half the sample remains on the pan placed beneath the tray. In this way the sample is repeatedly divided in half until a sample of the desired size is obtained.

(iii) *Mixing by Hand Method.*—The sample shall be well mixed and spread out in a layer of uniform thickness on a flat tray or mixing basin. The seed, after being spread out, must not be shaken before being sampled; should this happen, the blending and spreading must be repeated. Small portions of the seed shall then be taken with a spoon from a number of different places on the tray until the required quantity has been obtained. In no case shall the number of spoon samples be less than five.

(iv) *Mechanical Division.*

(c) The working sample shall be divided into two approximately equal parts and a duplicate analysis made. In case the purity percentages obtained with the two analyses should vary by more than the tolerances indicated in Table 2 (a) for Non-chaffy and Table 2 (b) for Chaffy seeds respectively, a third and, if necessary, a fourth analysis shall be made.

(d) Elke duplikaatmonster moet in gramme tot drie desimale plekke geweeg en in die volgende onderdele geskei word:—

(i) *Suiwersaad*, wat benewens die ryp, onbeskadigde saad van die soort getoets word, die volgende insluit:—

Gekrimpte of onontwikkelde saad; grasblomdele met 'n duidelike kariopsis wat endosperm bevat;

gebarste saad en stukkie gebreekte saad wat meer as een helfte van hul oorspronklike grootte is;

saad (botanies, vrugte en vrugagtige strukture) ongeag of hulle 'n egte saad bevat, tensy met die oog duidelik vasgestel kan word dat geen egte saad werklik aanwesig is nie. By hierdie klassifikasie word *Beta* en eensadige vrugte soos *Cichorium*, *Lactuca* en soortgelyke saad ingesluit;

aangetaste saad, uitgesonderd saad deur swamme vervorm tot sklerotia of brandspoorballe, en galknoppe as gevolg van aalwurmbesmetting;

los kariopsis van graan- en grassoorte wat van die kaffies verwyder is.

(ii) *Saad van ander gewasse* wat, uitgesonderd dié soort wat getoets word, saad insluit van plante wat as gewasse gekweek word. Ten opsigte van die klassifikasie van onontwikkelde, beskadigde, aangetaste en leë saad, is die onderskeiende eienskappe soos vir *Suiwersaad* uiteengesit ook van toepassing op *Saad van ander gewasse*.

(iii) *Onkruidsaad* wat, uitgesonderd sekere onontwikkelde of erg beskadigde onkruidsaad soos omskryf onder „onaktiewe stof”, bolletjies of knolle van plante insluit, wat volgens Wet, amptelike regulasies of deur algemene gebruik as onkruidsaad beskou word;

(iv) *Onaktiewe stof* wat insluit saadagtige dele van gewasplante, soos volg:—

brokkies van gebreekte of beskadigde saad wat minder as een helfte van die oorspronklike grootte is;

saad van peul- en koolgewasse (*Leguminosae* en *Cruciferae*) waarvan die saadhuid heeltemal verwyder is;

leë kaffies en los onvrugbare blomdele van gras;

aangehegte onvrugbare blomdele van gras wat van die vrugbare blomdele verwyder moet word, uitgenome by *Chloris gayana*, *Dactylis glomerata* en *Poa-species*. In die geval van *Dactylis* moet die gewig van die blompakkies wat minstens een kariopsis bevat, bepaal word en viervyftes van hierdie gewig by die „suiwersaad” en eenvyftes by „onaktiewe stof” getel word; saadagtige strukture van onkruidplate, soos volg:—

grassaad met meer as die helfte van die kiem verwyder; „saad” van die *Cuscuta-species* wat sag en asgrys tot roomwit van kleur is;

graskaffies en -blomdele waarin die kariopsis nie ontwikkel het nie;

saad van *Leguminosae* en *Cruciferae* met saadhuid heeltemal verwyder;

saad van *Ambrosia* met die omwindsel en vrugwand afwesig;

swart „saad” van *Plantago lanceolata*, hetsy verkrimp of nie;

alle swak ontwikkelde of leë strukture wat na saad lyk, maar wat by visuele ondersoek (insluitende die gebruik van weerkaatste lig) duidelik toon dat 'n kiem wel aanwesig is;

(d) Each duplicate sample shall be weighed in grams to three decimal places and shall then be separated into the following component parts:—

(i) *Pure Seed* which shall include in addition to mature, undamaged seed of the kind under consideration the following:—

Shriveled or immature seeds; grass florets with an obvious caryopsis containing endosperm; cracked seeds and pieces of seeds resulting from breakage that are more than one half their original sizes;

seeds (botanically, fruits and fruitlike structures) regardless of whether they contain a true seed, unless it is readily apparent by visual examination that no true seed is present. Included in this classification are *Beta* and one-seeded fruits such as *Cichorium*, *Lactuca* and similar seeds;

diseased seeds, excepting seeds which have been altered by fungi to form *sclerotia* or smut balls and galls resulting from *nematode* infestation;

free caryopsis of cereals and grasses removed from the glumes.

(ii) *Other Crop Seed* which shall include seeds of plants grown as crops other than the kind under consideration. With respect to the classification of immature, diseased, damaged and empty seeds, the distinguishing characteristics set out for *Pure Seed* shall also be applicable to *Other Crop Seed*.

(iii) *Weed Seed* which shall include seeds, bulblets or tubers of plants recognised as weeds by law, official regulations or by general usage, excepting undeveloped or badly injured weed seeds as described under “inert matter”.

(iv) *Inert Matter*, which shall include seed-like structures from crop plants as follows:—

Pieces of broken or damaged seeds less than one-half the original size;

seeds of legumes and crucifers with the seed coats entirely removed;

empty glumes and unattached sterile florets of grasses;

attached sterile florets of grasses, which must be removed from the fertile florets, except in *Chloris gayana*, *Dactylis glomerata* and species of *Poa*;

in the case of *Dactylis* the weight of the multiple florets which contain at least one caryopsis shall be determined, four-fifths of the weight added to the “pure seed” and one-fifth to the “inert matter”;

seed-like structures from weed plants as follows:—

Seeds of grasses with over one-half the embryo removed;

“seeds” of *Cuscuta* species which are fragile and ashen-grey to creamy white in colour;

glumes and florets of grasses in which the caryopsis has not developed;

seeds of *Leguminosae* and species of *Cruciferae* with the seed coats entirely removed;

seeds of *Ambrosia* with the involucre and pericarp absent;

black “seeds” of *Plantago lanceolata*, whether shriveled or not;

all badly developed or empty structures which resemble seeds, but which on visual examination (including the use of reflected light) can be definitely demonstrated as having an ambryo;

ander stof soos grond, sand, klippe, kaf, stingels, blare, aalwurmgalknoppe, keël-skubbe, keëlbrokkies, stukkie bas, blomme, swamliggame (soos ergot, ander sklerotia en brandspoorballetjies) en alle ander stof wat nie saad is nie.

(e) Indien die monster twee of meer eenderse soorte saad bevat wat in die hele werkmonster baie moeilik sal wees om te skei, kan die eenderse sade as 'n groep geskei en geweeg word. Van hierdie mengsel moet minstens 1,000 sade voor die voet geneem en die skeiding uit hierdie gedeelte gemaak word. Die verhouding van elke soort word dan volgens gewig vasgestel, of indien die saad ewe veel weeg, kan die verhouding vasgestel word deur die saad te tel. Van hierdie hoeveelheid word die persentasie in die hele monster bereken.

(f) Elkeen van die vier onderdele in paragraaf (d) van subartikel (1) van artikel 2 van hierdie Aanhangel genoem, moet in gramme tot drie desimale plekke geweeg word en die persentasie per gewig van elke onderdeel (gebaseer op die som van die gewigte van die onderdele en nie op die oorspronklike gewig nie moet bepaal word. Die som van die gewigte van die onderdele moet vergelyk word met die oorspronklike gewig daarvan om verlies aan materiaal of ander foute te kontroleer.

(g) Die gemiddeldes van die persentasiesyfers onderskeidelik vir suiwerheid, saad van ander gewasse, onkruidsaad en onaktiewe stof, wat van die duplikaat of meer ontledings verkry is, verteenwoordig die persentasies ten opsigte van suiwerheid, saad van ander gewasse, onkruidsaad en onaktiewe stof in die betrokke saad.

BEPALING VAN ONTKIEMING.

(2) (a) Om die ontkieming te bepaal, moet saad van die suiwersaadfraksie geneem word.

(b) Indien slegs 'n ontkiemingstoets nodig is, moet die suiwersaad vir die ontkiemingstoets voor die voet geneem word van—

(i) die monster soos ontvang van die inspekteur of beampte indien die suiwersaadgehalte van die monster as 98 persent of hoër beskou word;

(ii) 'n suiwersaadfraksie gemaak ooreenkomstig die bepalings van hierdie voorskrifte (uitgesonderd dat gewassaad, onaktiewe stof en onkruidsaad nie geskei hoef te word nie) indien die suiwersaadgehalte van die monster as laer as 98 persent beskou word.

(c) Minstens 400 sade moet, ongeag die grootte en voorkoms daarvan, afgetel en in replikate van 100 of minder getoets word.

(d) Die kiemmediums, temperatuur, duur van toets en spesiale behandelings vir die verskillende klasse saad word in Tabel 3 gespesifiseer.

(i) *Kiemmediums*.—Papierkiemmediums kan uit of absorberende kladpapier, filtreerpapier of papierhanddoekstof bestaan. Kladpapier en gevoude papierhanddoekstof word algemeen gebruik vir BP-toetse (tussen papier), handdoekstof vir RP-toetse (gerolde papier), en filtreerpapier, kladblokke of 'n kombinasie van die twee vir TP-toetse (bo-op papier). Vir TP-toetse kan filtreerpapier ook op absorberende watte of poreuse papierwatte geplaas word. Alle papierkiemmediums moet vry wees van skadelike chemikalieë en kleurstowwe wat in water oplosbaar is. Indien 'n ophoping van toksiese stowwe klaarblyklik voorkom, soos blyk uit die ontwikkeling van abnormale saailinge, moet hertoetse weer in steriele grond of vermikuliet gemaak word.

Die getal papiervelle wat gebruik word, sal van die dikte en samestelling daarvan afhang. Wanneer die kiemmediums nat is, moet hul totale dikte nie minder as ongeveer twee millimeter wees nie.

other matter such as soil, sand, stones, chaff, stems, leaves, nematode galls, cone scales, pieces of cones, pieces of bark, flowers, fungus bodies (such as ergot, other sclerotia and smut balls), and all other matter which is not seed.

(e) If the sample contains two or more similar kinds of seed which would be very difficult to separate in the entire working sample, it shall be permissible to separate and weigh the similar seeds as a group. From this mixture at least 1,000 seeds are to be taken indiscriminately and the separation made from this portion. The proportion of each kind is then determined by weight, or if the seeds are of similar weight, the proportion may be determined by count. From this quantity the percentage in the entire sample is calculated.

(f) Each of the four component parts, referred to under paragraph (d) of sub-section (1) of section 2 of this Annexure shall be weighed in grams to three decimal places and the percentage by weight of each part (based on the sum of the weights of the component parts and not on the original weight) shall be determined. The sum of the weights of the component parts shall be compared with the original weight of same as a check against loss of material or other error.

(g) The averages of the percentage figures of pure seed, other crop seed, weed seed and inert matter respectively obtained from the duplicate or more analyses shall represent the percentages of pure seed, seed, other crop seed, weed seed and inert matter in the seed under consideration.

DETERMINATION OF GERMINATION.

(2) (a) For the purpose of determining the germination, seed shall be taken from the pure seed fraction.

(b) If a germination test only is required, the pure seed for the germination test shall be taken indiscriminately from—

(i) the sample as received from the inspector or officer if the pure seed content of the sample is considered to be 98 per cent and above;

(ii) a pure seed fraction made according to the provisions of these prescriptions (except that crop seeds, inert matter and weed seeds need not be separated) if the pure seed content is considered to be less than 98 per cent.

(c) At least 400 seeds shall be counted without discrimination as to size and appearance and tested in replicates of 100 or fewer.

(d) The substrata, temperatures, duration of test and special treatments for the various classes of seeds are specified in Table 3.

(i) *Substrata*.—Paper substrata may be either absorbent blotters, filter paper or paper towelling. Blotters and folded paper towels are commonly used for BP (between paper) tests, towelling for RP (rolled paper) tests and filter paper, blotters or a combination of the two for TP (top of paper) tests. For TP tests filter paper may also be placed on absorbent cotton or porous paper wadding. All paper substrata must be free from injurious chemicals and water-soluble dyes. Whenever the accumulation of toxic substances is apparent from the development of abnormal seedlings, retests shall be made in sterile soil or vermiculite.

The number of sheets of paper to be used, will depend on its thickness and composition. The total thickness of the substrata, when wet, shall not be less than approximately two millimeters.

Grond moet nie toeslaan nie. Tuinleem-grond is geskik en moet vóór gebruik gesif word om groterige deeltjies daaruit te verwyder. Indien grond klei bevat wat kan toeslaan, behoort 'n voldoende hoeveelheid sand bygevoeg te word om hierdie toestand te verhelp. Sand moet vry wees van baie fyn sowel as groot deeltjies, en moet verkieslik saamgestel wees uit deeltjies wat deur 'n 0.8 mm. rondegatsif sal kan gaan, maar wat teruggehou sal kan word op 'n 0.05 mm. rondegatsif. Grassaad moet nie met grond bedek word nie, maar moet in die boonste deel van die kiemmedium vasgedruk word.

Poreuse porselein- of kleibakke wat in water of op nat sand staan, kan in plaas van die TP-kiemmedium (bo-op papier) gebruik word waar laasgenoemde in Tabel 3 aangedui word.

V-(vermikuliet) en S-(sand of grond) kiemmediums moet gesteriliseer word om enige bakterieë, swamme, spore, aalwurms en vreemde saad wat aanwesig mag wees, te vernietig.

- (ii) *Temperatuur*.—In Tabel 3 word voorsiening gemaak vir die gebruik van wisseltemperatuur (20° C.-30° C.) vir baie soorte saad. Dit laat die gebruik van sowel die Jacobsen-apparaat, of sogenaamde Kopenhaagse Tenk, as die gebruiklike ontkiemingskabinette en -kamers toe. Die konstante temperatuur van 20° C. kan tot 18° C. daal, maar mag nie hoër as 21° C. styg nie. Wisseltemperatuur moet vir ongeveer 16 uur per dag by die laer temperatuur en vir ongeveer 8 uur per dag by die hoër temperatuur gehou word. Die temperatuurwisseling moet skerp wees vir saad wat moontlik rustend is. Geleidelike veranderinge word toegelaat vir sade wat nie rustend is nie.
- (iii) *Lig*.—Saadsoorte wat lig vir ontkieming nodig het, kan by wisseltemperatuur getoets word soos aangedui in Tabel 3. Uitgesonderd waar anders aangedui, moet lig vir die hele duur van die hoër wisseltemperatuur verskaf word. Natuurlike of kunsmatige lig kan gebruik word, maar waar lig beskikbaar gestel word, moet die gespesifiseerde temperatuur gehandhaaf word. Vir sade wat moontlik rustend mag wees, moet die ligintensiteit tussen 750 en 1250 lux wees (ongeveer 75 tot 125 voetkerse).
- (iv) *Vogtigheid en deurlugting*.—Die aanvanklike hoeveelheid water moet in ooreenstemming met die geaardheid en afmetings van die saadbedding toegedien word, maar die hoeveelheid water wat daarna toegedien word, word aan die oordeel van die ontleder oorgelaat. Die kiemmedium moet op alle tye vogtig genoeg wees om die nodige vogtigheid aan die saad te verskaf. By die voorbereiding van grondtoetse moet water toegedien word totdat die digtheid van die grond sodanig is dat 'n bal gevorm word, as die grond in die palm van die hand gedruk word, maar dat die bal maklik sal breek as dit tussen die vingers gedruk word. Nadat die grond natgemaak is, moet dit deur 'n sif gevryf en in die maathouers geplaas word sonder om dit vas te druk.

Om vogverlies te voorkom, moet sand- en grondtoetse met klam kladpapier of glasplaatjies bedek word totdat die kiemplantjies begin uitkom. Die toevoeging van water nadat daar met die toets van die saad begin is, sal afhang van die verdamping van die kiemmedium in die ontkiemingskamers. Om te verseker dat die kiemmedium altyd genoeg water kry moet die ontkiemingstoetse gereeld nagegaan word.

Soil shall be non-caking, such as a garden, loam, and shall be sieved to remove large particles before it is used. If soil contains clay that may cause caking, a sufficient quantity of sand should be added to overcome this condition. Sand shall be free of both very fine and large particles, preferably composed of particles that will pass through a sieve having holes 0.8 mm. in diameter, but retained on a sieve having holes 0.05 mm. in diameter. Grass seeds shall not be covered with soil, but shall be pressed into the top of the substratum.

Porous porcelain or clay dishes standing in water or on moist sand may be used in lieu of TP (top of paper) substrata where the latter is indicated in Table 3.

V (Vermiculite) and S (Sand or Soil) substrata must be sterilised to kill any bacteria, fungi, spores, nematodes and foreign seeds that may be present.

- (ii) *Temperature*.—Provision is made in Table 3 for the use of alternating temperatures (20°-30° C.) for many kind of seeds. This permits the use of the Jacobsen apparatus or so-called Copenhagen Tank, as well as conventional germination cabinets and rooms. It is permissible to allow 20° C. constant temperature to run as low as 18° C., but it shall not exceed 21° C.

Alternating temperatures shall be held at the lower temperature for approximately 16 hours per day and at the higher temperature for approximately 8 hours per day. The temperature changes shall be sharp for seeds which are likely to be dormant. Gradual changes are allowed for non-dormant seeds.

- (iii) *Light*.—Kinds of seeds requiring light for germination may be tested at alternating temperatures, as indicated in Table 3. Light shall be provided for the entire duration at the higher alternating temperature, except as otherwise indicated. Either natural or artificial light may be employed, but in making the light available, the specified temperatures must be maintained. For seeds that are likely to be dormant, the light intensity shall be between approximately 750 and 1250 lux (approx. 75 to 125 ft. candles).

- (iv) *Moisture and Aeration*.—The initial amount of moisture shall be supplied according to the nature and the dimensions of the seed bed, but subsequent watering, if any shall be left to the discretion of the analyst. The substratum must be moist enough at all times to supply the needed moisture to the seeds. In preparing soil tests, water shall be added until the consistency of the soil is such that a ball is formed by squeezing in the palm of the hand, but, when pressed between two fingers, the ball will break easily. After the soil is wet, it shall be rubbed through a sieve and put into the containers for the test without packing.

To prevent loss of moisture, sand and soil tests shall be covered with moist blotters or glass plates until the seedlings begin to emerge. The addition of water subsequent to placing the seed in test will depend upon the evaporation from the substrata in the germination chambers. Germination tests shall be observed at frequent intervals to ensure an adequate moisture supply of the substrata at all times.

(e) 'n Saad word as ontkiem beskou wanneer dit tot 'n normale saailing ontwikkel het. Die volgende saailinge word as normaal beskou:—

- (i) Saailinge vry van bederf met normaal ontwikkelde en vaste saadlobbe en wortels;
- (ii) saailinge vry van bederf met normaal ontwikkelde wortels, maar waarvan klein gedeeltes van een of albei die saadlobbe afgebreek is;
- (iii) saailinge van *Lupinus*, *Phaseolus*, *Pisum*, *Zea*, *Vicia Faba* en alle spesies van *Cucurbitaceae* waarvan die primêre wortels afgebreek is, maar wat genoeg sekondêre wortels ontwikkel het om die saailing in die grond of sand vas te anker.

(f) Misvormde en abnormale saailinge word nie as ontkiem beskou nie.

Abnormale saailinge word as volg ingedeel:—

- (i) Saailinge vry van bederf en wat as gevolg van stadige ontkieming, veroorsaak deur 'n gebrek aan kiemkrag, aan die einde van die toetse swak ontwikkel is, ofskoon dit mag voorkom asof hulle in staat is om 'n normale wortel of normale sekondêre wortels te vorm. Dit sluit nie saailinge wat stadig ontwikkel as gevolg van hardskaligheid of kiemrus in nie;
- (ii) gebreekte saailinge, insluitende—
saailinge waarvan albei saadlobbe ontbreek;
saailinge waarvan 'n gedeelte van die wortel ontbreek en waarvan die latere groei van die sekondêre wortels nog nie ten tye van die finale telling plaasgevind het nie;
saailinge met barste, breekplekke of letsels aan die hipokotiele of wortels wat tot in die geleidingsweefsels strek;
- (iii) saailinge waarvan die kiemworteltjies vernouings het wat tot in die geleidingsweefsels strek;
- (iv) saailinge wat gedeeltelik of heeltemal bederf is, mits daar geen tekens is wat toon dat die besmetting van 'n ander saailing oorgedra is nie;
- (v) saailinge wat aan die einde van die ontkiemingstydperk feitlik geen tekens van groei toon nie, selfs al het die saadhuid gebarst, ongeag of die saadlobbe groen is of nie;
- (vi) saailinge met swak, ongesonde spruite of wortels;
- (vii) saailinge wat ernstige misvormdheid toon (bv. opkrul van die hipokotiel of saadlobbe) en feitlik sonder groeikrag is;
- (viii) saailinge wat abnormaal ontwikkel as gevolg van saadgedraagde siektes, mits daar geen tekens is wat toon dat die besmetting van 'n naburige besmette saailing oorgedra is nie;
- (ix) saailinge van *Cruciferae* (*Brassica*, *Raphanus*, ens.) soos volg:—

Goed ontwikkelde saailinge waarvan die wortels, hipokotiel of saadlobbe gedeeltelik bederf is, mits daar geen tekens is wat toon dat die besmetting van 'n naburige saailing oorgedra is nie;

saailinge met 'n goed ontwikkelde hipokotiel, maar met 'n kiemworteltjie sonder wortelhare;

saailinge met goed ontwikkelde spruite, maar met 'n kort, stomp kiemworteltjie, of sonder kiemworteltjie of wortels;

saailinge met diep, ongeheelde barste en letsels aan die hipokotiel wat tot in die geleidingsweefsels strek;

saailinge met 'n kiemworteltjie wat heeltemal of gedeeltelik verdun het;

goed ontwikkelde saailinge wat waterig of glaserig is;

(e) A seed shall be considered to have germinated when it has developed into a normal seedling. The following seedlings shall be considered as normal:—

- (i) Seedlings free from decay with normally developed and attached cotyledons and roots;
- (ii) seedlings free from decay, presenting normally developed roots, but having small portions of one or both cotyledons broken off;
- (iii) seedlings of *Lupinus*, *Phaseolus*, *Pisum*, *Zea*, *Vicia Faba* and all species of *Cucurbitaceae* having the primary roots broken, but sufficient seminal roots have developed to anchor the seedling in soil or sand.

(f) Malformed and abnormal seedlings shall not be considered to have germinated. Abnormal seedlings shall be evaluated as follows:—

- (i) Seedlings free from decay which are poorly developed at the end of the test as a result of slow germination due to low vigour, even though they appear capable of a normal root or normal secondary roots. This shall not include seedlings slow of development as a result of hard-seededness and dormancy;
- (ii) broken seedlings including—
seedlings with both cotyledons missing;
seedlings having a portion of the root missing, and where subsequent growth of secondary roots has not yet occurred at the time of the final count;
seedlings with cracks, breaks or lesions on the hypocotyls or roots that extend into the conducting tissues.
- (iii) seedlings whose radicles have constrictions extending into the conducting tissues;
- (iv) seedlings partly or wholly decayed, provided there is no evidence to show that the infection was derived from another seedling;
- (v) seedlings which, at the end of the germination period, show practically no signs of growth even though the seed coat may have burst, regardless of whether or not the cotyledons are green;
- (vi) seedlings with weak, unhealthy shoots or roots;
- (vii) seedlings showing grave deformities (e.g. rolling-up of the hypocotyl, or of the cotyledons) and practically devoid of vitality;
- (viii) seedlings which develop abnormally owing to seed-borne diseases, provided there is no evidence to show that the infection took place from a neighbouring infected seedling;
- (ix) seedlings of *Cruciferae* (*Brassica*, *Raphanus*, etc.) as follows:—

Well-developed seedlings of which the roots, hypocotyl or cotyledons are partly decayed, provided there is no evidence to show that the infection was derived from a neighbouring decayed seedling;

seedlings with well-developed hypocotyl, but with radicle devoid of root-hairs;

seedlings with well-developed shoots, but with a short, stubby radicle or without radicle or roots;

seedlings with deep unhealed cracks and lesions on the hypocotyl extending into the conducting tissues;

seedlings with a radicle which is wholly or partly attenuated;

well-developed seedlings which are watery or glassy;

saailinge waarvan 50 persent of meer van die oppervlakte van die saadlobbe (of die oppervlakte rondom die groeipunt) as gevolg van siekteorganismes soos *Alternaria*, deur bruin vlekke of kolle verkleur is;

saailinge met abnormaal groot saadlobbe en baie klein kiemworteltjies;

saailinge met enige ander ernstige abnormaaliteit wat nie spesifiek aangegee is nie (bv. gekrulde saadlobbe, gekrulde hipokotiele, ens.);

(x) saailinge van uie en prei (*Allium*), soos volg:—

Saailinge met stomp of vernoude wortels, gewoonlik met 'n verdikking by die voet van die hipokotiel, ongeag of dit deur bakteriese verrotting aangetas is;

saailinge met 'n swak ontwikkelde blaaragtige saadlob sonder 'n definitiewe kromming, soms dun, waterig en stadig te groei;

(xi) saailinge van blaarslaai (*Lactuca*), soos volg:—

Saailinge met bruinkleurige kiemworteltjies of wortels, of met verdunde wortels sonder wortelhare;

saailinge met meer as die helfte van die oppervlakte van hul saadlobbe bedek met bruinkleurige vlekke, of 'n kleiner oppervlakte indien dit langs die groeipunt voorkom;

swak saailinge met kort kiemworteltjies en hiepokotiele;

saailinge met ongeheelde barste en letsels in die hipokotiel wat tot in die geleidingsweefsels strek;

(xii) saailinge van *Beta* soos volg:—

Saailinge wat geen wortel het nie, of met 'n stomp primêre wortel en swak ontwikkelde sekondêre wortels, gewoonlik vereenselwig met 'n verkorte hipokotiel;

saailinge met misvormde, verkorte, verdraaide, waterige of stomp hipokotiele, gewoonlik met stomp wortels geassosieer;

saailinge met diep, korrelrige letsels of barste in die hipokotiele, indien hulle die geleidingsweefsels skyn te belemmer;

saailinge waarvan albei saadlobbe ontbreek soos in monsters van „gevryfde” beetsaad en soms in monsters van spinasie;

saailinge met twee groot saadlobbe, maar met 'n misvormde, kort hipokotiel—gewoonlik met 'n stomp wortel;

saailinge met bedorwe saadlobbe of hipokotiel, mits dit nie die gevolg van ondoeltreffende toetstoestande is nie;

(xiii) grassaailinge soos volg:—

Saailinge sonder wortels;

saailinge sonder groen blare, maar waarvan slegs die wit skede of koleoptiel gevorm is; saailinge met verkorte spruite wat nie tot hoogstens die helfte van die afstand deur die koleoptiel strek;

saailinge met dun, fingerige of waterige spruite gepaard met swak wortelonwikkeling en bedorwe korrels;

saailinge met erg versplinterde of in die lengte gesplete blare, met of sonder splitting van die koleoptiel;

(xiv) klawersaailinge (*Trifolium*) en ander kleinsadige peulgewasse, soos volg:—

Saailinge met stomp wortels, gewoonlik met verkorte hipokotiele geassosieer;

saailinge met diep lengtebarsies aan die wortels of hipokotiele wat tot in die geleidingsweefsels van die hipokotiele strek;

saailinge waarvan albei saadlobbe ontbreek, ongeag of daar 'n epikotiel aanwesig is of nie;

seedlings having 50 per cent or more of the area of the cotyledons (or the area around the growing point) discoloured by brown spots or patches due to disease organisms such as *Alternaria*;

seedlings with abnormally large cotyledons and very small radicles;

seedlings showing any other serious abnormality, not specifically indicated (e.g. curled cotyledons, curled hypocotyl, etc.);

(x) seedlings of onion and leek (*Allium*) as follows:—

Seedlings with blunt or constricted roots, usually with a thickened area at the base of the hypocotyl, regardless of whether attacked by bacterial rot;

seedlings with a poorly developed leaf-like cotyledon without a definite bend, sometimes spindly, watery and slow to sprout;

(xi) seedlings of lettuce (*Lactuca*) as follows:—

Seedlings with brown-coloured radicles or roots, or with attenuated roots devoid of root-hairs;

seedlings with more than one-half the area of their cotyledons covered with brown-coloured spots or a smaller area if adjacent to the growing point;

weak seedlings with short radicles and hypocotyls;

seedlings with unhealed cracks and lesions in the hypocotyls, extending into the conducting tissues;

(xii) seedlings of *Beta* as follows:—

Seedlings having no root or a stubby primary root and poor secondary root development, usually associated with a shortened hypocotyl;

seedlings with malformed, shortened, twisted, watery or stubby hypocotyls, usually associated with stubby roots;

seedlings with deep grainy lesions or cracks in the hypocotyls, if they appear to interfere with the conducting tissues;

seedlings with both cotyledons absent as in samples of “sheared” beets and occasional samples of spinach;

seedlings with two large cotyledons, but a malformed, short, hypocotyl, usually with a stubby root;

seedlings having decayed cotyledons or hypocotyl, provided they are not the result of improper test conditions;

(xii) seedlings of grasses as follows:—

Seedlings without roots;

seedlings without green leaves, but only the white sheath or coleoptile formed;

seedlings with shortened shoots extending no more than one-half the distance up through the coleoptile;

seedlings with thin, spindly or watery shoots accompanied by weak root development and decayed grains;

seedlings with badly shattered or longitudinally split leaves with or without splitting of the coleoptile;

(xiv) seedlings of clovers (*Trifolium*) and other small-seeded legumes as follows:—

Seedlings with stubby roots, usually associated with shortened hypocotyls;

seedlings with deep, longitudinal splits on the roots or hypocotyls extending into the conducting tissues of the hypocotyls;

seedlings with both cotyledons missing, regardless of whether the epicotyl is present or not;

saailinge waarvan een saadlob ontbreek, as die epikotiel ook ontbreek;
 saailinge met verrotte saadlobbe, mits die bederf nie van 'n naburige saad na die saailing oorgedra of die gevolg van ondoeltreffende toetstoestande is nie;
 tingerige, waterige saailinge, indien nie die gevolg van 'n oormaat van water in die kiemmedium nie;

(xv) saailinge van bone (*Phaseolus*), erte (*Pisum*) en ander grootsadige peulgewasse, soos volg:—

Saailinge waarvan die epikotiel ontbreek of sodanig gebreek of beskadig is dat dit nie gedurende die kiemtoets ontwikkel nie, al mag daar spruite uit die oksel van een of albei saadlobbe groei;
 saailinge waarvan albei primêre blare ontbreek, al is die epikotiel opgeskonde;
 saailinge met misvormde hipokotiele gekenmerk deur oop barsies, of 'n gekrulde, verkorte of verdikte voorkoms het;
 saailinge waarvan die primêre wortel ontbreek en sonder 'n stel goed ontwikkelde sekondêre wortels;
 saailinge met twee spruite wat albei swak is;
 saailinge waarvan veral die epikotiel bederf is, mits die bederforanisme uit die ontkiemende saad versprei.

(g) Wanneer saad van *Beta Vulgaris* getoets word, moet toetse op so 'n wyse uitgevoer word dat die identiteit van elke saailing met die saadstruktuur waaruit dit ontwikkel het, behou word. Dit kan geskied deur die saailinge te tel en te verwyder voordat hulle van die saadstruktuur skei of om van 'n apparaat gebruik te maak om die saadstruktuur in die toets te skei. 'n Saadeenheid van *Beta* word geag ontkiem te wees as dit een of meer normale saailinge voortbring; eweneens moet 'n blompakke van *Dactylis Glomerata*, *Chloris Gayana* en spesies van *Poa* as 'n enkele saad ontkiem word. Saad van *Leguminosae* wat hard bly aan die einde van die toetstydperk, soos voorgeskryf in Tabel 3, omdat dit nie water opgeneem het nie, word geag „harde saad” te wees. As daar aan die einde van die ontkiemingstoeystydperk vir sade van *Leguminosae* geswelde saad aanwesig is, of saad wat net begin het om te ontkiem, kan die toetse vir nog vyf dae voortgesit en die normale saailinge by die ontkiemingspersentasie ingesluit word.

(h) In gevalle waar dit wenslik is om die ontkieming van rustende saad te verhaas, word die volgende spesiale behandelings toegelaat:—

- (i) Om saad vooraf te verkoel by temperatuurgrade soos aangegee in Tabel 3. Die saad moet gedurende die voorverkoelingstydperk met 'n vogtige kiemmedium in aanraking gehou word;
- (ii) om 'n 0.2-persent oplossing van kaliumnitraat te gebruik om die kiemmedium nat te maak;
- (iii) om die saad, vóór ontkieming, by 'n temperatuur van hoogstens 40° C. te droog.

(j) Nuwe toetse moet gemaak word as daar 'n verskil is van—

- (i) 10 persent en meer tussen die ontkiemingspersentasies van enige twee replikate as die gemiddelde ontkieming van al die replikate in die toets 90 persent of meer is; of
- (ii) 12 persent en meer tussen die ontkiemingspersentasies van enige twee replikate as die gemiddelde ontkieming van al die replikate in die toets van 80 tot 89 persent is;
- (iii) 15 persent en meer tussen die ontkiemingspersentasies van enige twee replikate as die gemiddelde ontkieming van al die replikate in die toets 79 persent of minder is.

(k) Die ontkiemingspersentasie moet op 'n telingsbasis bereken word. Die gemiddelde syfer verkry van die replikate in die toets word as die ontkieming van die betrokke saad beskou.

seedlings with one cotyledon missing, if the epicotyl is also absent;
 seedlings with decayed cotyledons, provided the decay did not spread to the seedling from adjacent seed, or was not the result of improper test conditions;
 spindly, watery seedlings, if not the result of excess moisture in substrata;

(xv) seedlings of beans (*Phaseolus*), peas (*Pisum*) and other large-seeded legumes as follows:—

Seedlings with epicotyl missing, broken or damaged to an extent that it does not develop during the germination test, even though there may be shoots arising from the axil of one or both of the cotyledons;
 seedlings with both primary leaves missing, even though the epicotyl is intact;
 seedlings with malformed hypocotyl which may be characterised by open splits, or appear curled or shortened or thickened;
 seedlings with primary root missing and no well-developed set of secondary roots;
 seedlings with two shoots, both of which are weak;
 decayed seedlings, especially the epicotyl, provided the decay organism spreads from the germinating seed.

(g) When testing seeds of *Beta Vulgaris* tests must be conducted in such a manner as to retain the identity of each seedling with the seed structure from which it developed. This may be done by either counting and removing the seedlings before they separate from the seed structures or by using some device to separate the seed structures in the test. A seed unit of *Beta* is considered to have germinated if it produces one or more normal seedlings, likewise a multiple floret of *Dactylis Glomerata*, *Chloris Gayana* and species of *Poa* shall be germinated as a single seed. Seeds of *Leguminosae* which remain hard at the end of the test period prescribed in Table 3 because they have not absorbed water are to be regarded as “hard seed”. If, at the end of the germination test period provided for seed of *Leguminosae* there are present swollen seeds or seeds which have just started to germinate, the test may be continued for five additional days and the normal seedlings included in the germination percentage.

(h) In cases, where it is desirable to hasten the germination of dormant seeds, the following special treatments shall be permissible:—

- (i) To pre-chill the seed at temperatures as indicated in Table 3. The seed shall be kept in contact with a moist substratum during the pre-chilling period;
- (ii) to use an 0.2 per cent solution of potassium nitrate for moistening the substratum;
- (iii) to dry the seed before germination at a temperature not exceeding 40° C.

(j) New tests shall be made where there is a difference of—

- (i) 10 per cent or more in the germination percentages between any two replicates, if the average germination of all the replicates thus tested, is 90 per cent or more; or
- (ii) 12 per cent or more in the germination percentages between any two replicates, if the average germination of all the replicates thus tested, is from 80 to 89 per cent;
- (iii) 15 per cent or more in the germination between any two replicates if the average germination of all the replicates thus tested, is 79 per cent or less.

(k) The germination percentage shall be calculated on a count basis. The average figure obtained from the replicates tested, shall be the germination of the seed in question.

BEPALING VAN EGTHEID VAN SOORT EN VARIËTEIT.

(3) (a) (i) Om die egtheid van soort en variëteit deur middel van saadeienskappe te bepaal, moet minstens 1,000 saadjies sonder onderskeid ten opsigte van grootte en voorkoms geneem word van die monster wat van die inspekteur of beampte ontvang is.

(ii) 'n Saad word geag soort- en/of variëteitseg te wees as dit met inagneming van klimaats-, siekte- of ander versteuring van die voorkoms, grootte en vorm van die saad, voldoen aan die algemeen aanvaarde plantkundige beskrywing van die betrokke soort en/of variëteit.

(iii) Die soort- en/of variëteitsegte persentasie moet op 'n tellingsbasis bereken word.

(b) (i) Om die egtheid van soort en variëteit deur middel van 'n groeitoets te bepaal, moet minstens 1,000 saadjies sonder onderskeid ten opsigte van grootte en voorkoms in toetspersele gedurende die eerste saaiseisoen ná ontvangs van die monster gesaai word.

(ii) Die toets moet onder optimale toestande uitgevoer word, wat vereis dat die plante gekweek moet word in streke waar die gewas aangepas is en volgens die beste erkende verbouingspraktyke, met inbegrip van behoorlike bestryding van insekte en siektes, asook gedurende die regte seisoen.

(iii) 'n Saad word geag soort- en/of variëteitseg te wees as dit met inagneming van klimaats-, siekte- of ander versteuring van die groei van die plant, 'n plant voortbring wat voldoen aan die algemeen aanvaarde morfologiese beskrywing van die betrokke soort en/of variëteit.

(iv) Die soort- en/of variëteitsegte persentasie moet bereken word op 'n tellingsbasis van die werklike getal plante wat voldoende ontwikkel het om die soort en/of variëteit vas te stel.

(c) (i) Die ultra-violettoets (ook bekend as die Gentner-fluoressensietoets) kan gebruik word om die persentasies van *Lolium perenne* en *Lolium multiflorum* te bepaal in die monsters wat hierdie saad bevat.

(ii) Die toets moet uit minstens 400 saadjies in replikate van 100 of minder bestaan.

(iii) Die saad moet vir ontkieming op wit filtreerpapier geplaas en so gespasieer en gerangskik word dat die wortels nie inmekaar rank en verwarring in die fluoressensielyste ontstaan nie. Die filtreerpapier kan indien nodig op 'n addisionele kiemmedium geplaas word om die regte graad van vogtigheid te handhaaf.

(iv) Met betrekking tot die temperatuur en vogtigheid vir die toets en metodes om die kiemrus te breek, moet die prosedure in „Bepaling van Ontkieming” beskryf, gevolg word. Die eerste ondersoek kan op die sesde dag gedoen en die finale telling moet op die veertiende dag gemaak word.

(v) Die saailinge moet onder ultravioletlig ondersoek word deur middel van 'n ultravioletlamp wat van tussen 3,000 en 4,000 A.E. (Angstromeenhede) uitstraal met 'n maksimum van tussen 3,600 en 3,700 A.E., en 'n spoor van sigbare lig. Die intensiteit van die uitstraling moet voldoende wees om die swakste fluoressensielyste bloot te lê. Lampe wat oor hierdie hoedanighede beskik, sluit in die—

(a) Hanau- en Hanovia-kwartslampe;

(b) Cooper-Hewitt-kwikdamlamp (250 Watt);

(c) Keese Manufacturing Company se model No. 7, swart lig, met Corning warmtebestande rooipers ultrafilter (No. 5874 of No. 5840) en General Electric-kwikgloeilamp (EH⁴);

(d) Philip se H.P.W.-125 W.-lamp.

(vi) Saailinge wat die nodige fluoressensie toon, moet as *Lolium multiflorum* en saailinge wat geen fluoressensie toon nie, as *Lolium perenne* getel word.

(vii) Die persentasies van fluoressensie- en nie-fluoressensiesaaillinge moet gebaseer word op die getal normale saailinge wat voortgebring word. Die abnormale saailinge moet op dieselfde wyse as dooie saad behandel word.

DETERMINATION OF GENUINENESS OF KIND AND VARIETY.

(3) (a) (i) For the purpose of determining the genuineness of kind and variety by means of seed characteristics, at least 1,000 seeds shall be taken without discrimination as to size and appearance from the sample received from the inspector or officer.

(ii) A seed shall be considered true to kind and/or variety if, with the consideration to climatical, disease or other disturbance of the appearance, size and shape of the seed, it complies with the generally accepted botanical description of the kind and/or variety in question.

(iii) The true-to-kind and/or variety percentage shall be calculated on a count basis.

(b) (i) For the purpose of determining the genuineness of kind and variety by means of a growing test, at least 1,000 seeds taken without discrimination as to size and appearance shall be planted in control plots during the first sowing season following the receipt of sample.

(ii) The test shall be made under optimum conditions, which shall require growing the plants in areas where the crop is adapted, under the best possible accepted cultural practices including proper control of insects and diseases, and during the proper season.

(iii) A seed shall be considered true-to-kind and/or variety if, with due consideration to climatical, disease or other disturbance of the growth of the plant, it produces a plant which complies with the general accepted morphological description of the kind and/or variety in question.

(iv) The true-to-kind and/or variety percentage shall be calculated on a count basis of the actual number of plants which have developed sufficiently to judge the kind and/or variety.

(c) (i) The ultra-violet test (also known as the Gentner fluorescence test) may be used to determine the percentages of *Lolium perenne* and *Lolium multiflorum* in samples containing these seeds.

(ii) The test shall consist of not less than 400 seeds in replicates of 100 or less.

(iii) The seeds shall be placed on white filter paper for germination, spaced and arranged so as to prevent entwining of the roots and confusion of the fluorescent lines. The filter paper may be placed on additional substrata, if necessary, for maintenance of proper moisture.

(iv) In regard to temperature and moisture for testing, and methods of overcoming dormancy, the procedure described under "Determination of Germination" shall be followed. The first examination may be made on the sixth day and the final count shall be made on the fourteenth day.

(v) The seedlings shall be examined under ultra-violet light produced by an ultra-violet lamp transmitting radiations between 3,000 and 4,000 A.U. (Angstrom Units) with a maximum radiation between 3,600 and 3,700 A.U., and a trace of visible light. The intensity of the radiation must be sufficient to reveal the weakest fluorescent lines. Lamps possessing these qualities include the—

(a) Hanau and Hanovia Quarts Lamps;

(b) Cooper-Hewitt Mercury-Vapour, 250-Watt Lamp;

(c) Keese Manufacturing Company's model No. 7, Black-light with Corning Heat Resistant Red Purple ultra No. 5874 or No. 5840 filter and General Electric Mercury EH⁴ Bulb; and the

(d) Philip's H.P.W.-125-Watt Lamp.

(vi) Seedlings showing the necessary fluorescence shall be counted as *Lolium multiflorum* and seedlings not showing any fluorescence shall be counted as *Lolium perenne*.

(vii) The percentages of fluorescent and non-fluorescent seedlings shall be based on the number of normal seedlings produced. The abnormal seedlings shall be treated the same as dead seeds.

(viii) Nuwe toetse moet gemaak word as daar 'n verskil is van 10 persent of meer tussen die persentasies fluoressensie-/nie-fluoressensiesaaillinge van enige twee replikate as die gemiddelde persentasie fluoressensie-/nie-fluoressensiesaaillinge van al die replikate in die toets 90 persent of meer is;

12 persent of meer tussen die persentasies fluoressensie-/nie-fluoressensiesaaillinge van enige twee replikate as die gemiddelde persentasie fluoressensie-/nie-fluoressensiesaaillinge van al die replikate in die toets van 80 tot 89 persent is; 15 persent of meer tussen die persentasies fluoressensie-/nie-fluoressensiesaaillinge van enige twee replikate as die gemiddelde persentasie fluoressensie-/nie-fluoressensiesaaillinge van al die replikate in die toets 79 persent en laer is.

(ix) Die persentasie fluoressensie-/nie-fluoressensiesaaillinge moet op 'n tellingsbasis bereken word. Die gemiddelde syfer verkry van die replikate in die toets is die persentasie fluoressensie-/nie-fluoressensiesaaillinge.

BEPALING VAN PERSENTASIE ALKALOÏED-BEVATTENDE SAAD.

(4) (a) Om die persentasie alkaloïedbevattende saad te bepaal, moet minstens 400 saadjies voor die voet van die monster wat van die inspekteur of beaampte ontvang is, geneem en in replikate van 100 of minder getoets word.

(b) Om die toets uit te voer, moet die volgende oplossing gebruik word:—

20 gram kaliumjodied,
10 gram jodiumkristalle,
1,000 kubieke sentimeter gedistilleerde water.

(c) Die saad moet in die dwarste deurgesny en die een helfte daarvan vir tien sekondes in die voorgeskrewe oplossing geplaas word, waarna dit vir vyf sekondes in water gewas en dan op filtreerpapier uitgesprei moet word.

Saad waarvan die snyvlak 'n bruinrooi verkleuring toon, moet as alkaloïedbevattend en dié met 'n geelbruin verkleuring as nie-alkaloïedbevattend beskou word.

(d) Die persentasie alkaloïedbevattende saad moet op 'n tellingsbasis bereken word. Die gemiddelde syfer verkry van die replikate in die toets is die persentasie alkaloïedbevattende saad.

TABEL 1.

MINIMUM GEWIGTE VAN WERKMONSTERS VIR SUIWERHEIDSONTLEDING.

Soort saad.	Minimum gewigte vir suiwerheidsontleding (gram).
<i>Agrostis alba</i>	0.5
<i>Allium cepa</i>	10
<i>Allium porrum</i>	10
<i>Atriplex semi-baccata</i>	10
<i>Beta vulgaris</i>	50
<i>Brassica campestris</i>	10
<i>Brassica napus</i> en variëteite.....	10
<i>Brassica oleracea</i> en variëteite.....	10
<i>Brassica rapa</i>	10
<i>Bromus catharticus</i>	25
<i>Bromus inermis</i>	5
<i>Chloris gayana</i>	1
<i>Cichorium endivia</i>	5
<i>Citrullus vulgaris</i>	500
<i>Cucumis melo</i>	100
<i>Cucumis sativus</i>	100
<i>Cucurbita maxima</i>	500
<i>Cucurbita moschata</i>	500
<i>Cucurbita pepo</i>	500
<i>Dactylis glomerata</i>	2
<i>Daucus carota</i>	5
<i>Digitaria spp.</i>	2
<i>Ehrharta calycina</i>	5
<i>Eragrostis spp.</i>	1
<i>Festuca arundinacea</i>	5
<i>Festuca pratensis</i> (F. <i>elator</i>).....	5
<i>Festuca rubra</i>	2
<i>Lactuca sativa</i>	5
<i>Lepedeza stipulacea</i>	5
<i>Lolium multiflorum</i>	5
<i>Lolium perenne</i>	5
<i>Lolium loliaceum</i>	5
<i>Lupinus albus</i>	500
<i>Lupinus angustifolius</i>	500
<i>Lupinus luteus</i>	500

(viii) New tests shall be made where there is a difference of 10 per cent or more in the percentages fluorescent/non-fluorescent seedlings between any two replicates if the average percentage fluorescent/non-fluorescent seedlings of all the replicates thus tested is 90 per cent or more; 12 per cent or more in the percentages fluorescent/non-fluorescent seedlings between any two replicates if the average percentage fluorescent/non-fluorescent seedlings of all the replicates thus tested is from 80 to 89 per cent; 15 per cent or more in the percentages fluorescent/non-fluorescent seedlings between any two replicates if the average percentage fluorescent/non-fluorescent seedlings of all the replicates thus tested, is 79 per cent or less.

(ix) The percentage fluorescent/non-fluorescent seedlings shall be calculated on a count basis. The average figure obtained from the replicates tested, shall be the percentage fluorescent/non-fluorescent seedlings.

DETERMINATION OF PERCENTAGE ALKALOID CONTAINING SEEDS.

(4) (a) In order to determine the percentage of alkaloid containing seeds, at least 400 seeds shall be taken without discrimination from the sample received from the inspector or officer and tested in replicates of 100 or less.

(b) For the purpose of the test a solution, made up as follows, shall be used:—

20 grams potassium iodide,
10 grams iodine crystals,
1,000 cubic centimeters distilled water.

(c) The seeds shall be cut through crosswise and the one-half placed in the solution, as prescribed above, for ten seconds, after which the seeds shall be washed with water for five seconds and then spread out on filter paper.

Seeds of which the cut surfaces show a brown-red discolouration shall be considered as alkaloid containing and a yellow-brown discolouration shall be considered as alkaloid-free.

(d) The percentage alkaloid seeds shall be calculated on a count basis. The average figures obtained from the replicates tested, shall be the percentage of alkaloid containing seeds.

TABEL 1.

MINIMUM WEIGHTS OF WORKING SAMPLES FOR PURITY ANALYSIS.

Kind of Seed.	Minimum Weights for Purity Components (grams).
<i>Agrostis alba</i>	0.5
<i>Allium cepa</i>	10
<i>Allium porrum</i>	10
<i>Atriplex semi-baccata</i>	10
<i>Beta vulgaris</i>	50
<i>Brassica campestris</i>	10
<i>Brassica napus</i> and varieties.....	10
<i>Brassica oleracea</i> and varieties.....	10
<i>Brassica rapa</i>	10
<i>Bromus catharticus</i>	25
<i>Bromus inermis</i>	5
<i>Chloris gayana</i>	1
<i>Cichorium endivia</i>	5
<i>Citrullus vulgaris</i>	500
<i>Cucumis melo</i>	100
<i>Cucumis sativus</i>	100
<i>Cucurbita maxima</i>	500
<i>Cucurbita moschata</i>	500
<i>Cucurbita pepo</i>	500
<i>Dactylis glomerata</i>	2
<i>Daucus carota</i>	5
<i>Digitaria spp.</i>	2
<i>Ehrharta calycina</i>	5
<i>Eragrostis spp.</i>	1
<i>Festuca arundinacea</i>	5
<i>Festuca pratensis</i> (F. <i>elator</i>).....	5
<i>Festuca rubra</i>	2
<i>Lactuca sativa</i>	5
<i>Lepedeza stipulacea</i>	5
<i>Lolium multiflorum</i>	5
<i>Lolium perenne</i>	5
<i>Lolium loliaceum</i>	5
<i>Lupinus albus</i>	500
<i>Lupinus angustifolius</i>	500
<i>Lupinus luteus</i>	500

Soort saad.	Minimum gewigte vir suiwerheids- ontleding (gram).	Kind of Seed.	Minimum Weights for Purity Components (grams).
<i>Lycopersicon esculentum</i>	5	<i>Lycopersicon esculentum</i>	5
<i>Medicago sativa</i>	5	<i>Medicago sativa</i>	5
<i>Ornithopus cativus</i>	10	<i>Ornithopus cativus</i>	10
<i>Paspalum dilatatum</i>	2	<i>Paspalum dilatatum</i>	2
<i>Paspalum urvillei</i>	2	<i>Paspalum urvillei</i>	2
<i>Pastinaca sativa</i>	10	<i>Pastinaca sativa</i>	10
<i>Phalaris arundinacea</i>	2	<i>Phalaris arundinacea</i>	2
<i>Phalaris tuberosa</i>	5	<i>Phalaris tuberosa</i>	5
<i>Phaseolus vulgaris</i>	500	<i>Phaseolus vulgaris</i>	500
<i>Pisum sativum</i> var. <i>hortense</i>	500	<i>Pisum sativum</i> var. <i>hortense</i>	500
<i>Pisum sativum</i> var. <i>arvense</i>	500	<i>Pisum sativum</i> var. <i>arvense</i>	500
<i>Poa pratensis</i>	1	<i>Poa pratensis</i>	1
<i>Raphanus sativus</i>	50	<i>Raphanus sativus</i>	50
<i>Setaria spp.</i>	5	<i>Setaria spp.</i>	5
<i>Setaria sphacelata</i>	2	<i>Setaria sphacelata</i>	2
<i>Solanum melongena</i> var. <i>esculentum</i>	10	<i>Solanum melongena</i> var. <i>esculentum</i>	10
<i>Sorghum alnum</i>	50	<i>Sorghum alnum</i>	50
<i>Sorghum sudanense</i>	25	<i>Sorghum sudanense</i>	25
<i>Trifolium frageferum</i>	5	<i>Trifolium frageferum</i>	5
<i>Trifolium incarnatum</i>	10	<i>Trifolium incarnatum</i>	10
<i>Trifolium pratense</i>	5	<i>Trifolium pratense</i>	5
<i>Trifolium subterraneum</i>	25	<i>Trifolium subterraneum</i>	25
<i>Vicia faba</i>	500	<i>Vicia faba</i>	500
<i>Vicia sativa</i>	100	<i>Vicia sativa</i>	100
<i>Vicia villosa</i>	100	<i>Vicia villosa</i>	100
<i>Zea mays</i> var. <i>saccharata</i>	500	<i>Zea mays</i> var. <i>saccharata</i>	500

TABEL 2 (a).

TOELAATBARE SPELING VIR VERSKILLE IN SUIWERHEID BY DUPLIKAATONTLEDINGS VAN DIE WERKMUNSTER BY NIE-KAFAGTIGE SADE.

Suiwerheids- waarde. %	0-00	0-10	0-20	0-30	0-40	0-50	0-60	0-70	0-80	0-90	Suiwerheids- waarde. %
100	0-60	—	—	—	—	—	—	—	—	—	100
99	0-79	0-77	0-75	0-73	0-71	0-69	0-67	0-65	0-63	0-61	99
98	1-00	0-98	0-96	0-94	0-92	0-90	0-88	0-86	0-83	0-81	98
97	1-18	1-16	1-14	1-12	1-10	1-08	1-06	1-05	1-04	1-01	97
96	1-36	1-34	1-33	1-31	1-29	1-27	1-25	1-23	1-21	1-20	96
95	1-55	1-52	1-50	1-48	1-46	1-45	1-44	1-42	1-40	1-38	95
94	1-72	1-71	1-69	1-67	1-65	1-63	1-62	1-60	1-58	1-56	94
93	1-90	1-88	1-86	1-85	1-83	1-81	1-79	1-78	1-76	1-74	93
92	2-07	2-05	2-03	2-02	2-00	1-98	1-96	1-95	1-93	1-91	92
91	2-23	2-22	2-20	2-18	2-17	2-15	2-13	2-12	2-10	2-08	91
90	2-40	2-38	2-36	2-35	2-33	2-31	2-30	2-28	2-27	2-25	90
89	2-55	2-54	2-52	2-51	2-49	2-47	2-46	2-44	2-43	2-41	89
88	2-71	2-68	2-67	2-66	2-65	2-63	2-62	2-60	2-58	2-57	88
87	2-86	2-84	2-83	2-81	2-80	2-78	2-77	2-75	2-74	2-72	87
86	3-00	2-99	2-97	2-96	2-95	2-93	2-92	2-90	2-89	2-87	86
85	3-15	3-13	3-12	3-10	3-09	3-07	3-06	3-05	3-03	3-02	85
84	3-28	3-27	3-26	3-24	3-23	3-21	3-20	3-19	3-17	3-16	84
83	3-42	3-40	3-39	3-38	3-36	3-35	3-34	3-32	3-31	3-30	83
82	3-55	3-53	3-52	3-51	3-50	3-48	3-47	3-46	3-44	3-43	82
81	3-67	3-66	3-65	3-64	3-62	3-61	3-60	3-59	3-57	3-56	81
80	3-80	3-78	3-77	3-76	3-75	3-73	3-72	3-71	3-70	3-68	80
79	3-91	3-90	3-89	3-88	3-87	3-85	3-84	3-83	3-82	3-81	79
78	4-03	4-02	4-00	3-99	3-98	3-97	3-96	3-95	3-94	3-92	78
77	4-14	4-13	4-12	4-10	4-09	4-08	4-07	4-06	4-05	4-04	77
76	4-24	4-23	4-22	4-21	4-20	4-19	4-18	4-17	4-16	4-15	76
75	4-35	4-33	4-32	4-31	4-30	4-29	4-28	4-27	4-26	4-25	75
74	4-44	4-43	4-42	4-41	4-40	4-39	4-38	4-37	4-36	4-35	74
73	4-54	4-53	4-52	4-51	4-50	4-49	4-48	4-47	4-46	4-45	73
72	4-63	4-62	4-61	4-60	4-59	4-58	4-57	4-56	4-56	4-55	72
71	4-71	4-70	4-70	4-69	4-68	4-67	4-66	4-65	4-64	4-64	71
70	4-80	4-79	4-78	4-77	4-76	4-75	4-75	4-74	4-73	4-72	70
69	4-87	4-87	4-86	4-85	4-84	4-83	4-83	4-82	4-81	4-80	69
68	4-95	4-94	4-93	4-93	4-92	4-91	4-90	4-90	4-89	4-88	68
67	5-02	5-01	5-00	5-00	4-99	4-98	4-98	4-97	4-96	4-95	67
66	5-08	5-08	5-07	5-06	5-06	5-05	5-04	5-04	5-03	5-02	66
65	5-15	5-14	5-13	5-13	5-12	5-11	5-11	5-10	5-10	5-09	65
64	5-20	5-20	5-19	5-19	5-18	5-17	5-17	5-16	5-16	5-15	64
63	5-26	5-25	5-25	5-24	5-24	5-23	5-23	5-22	5-21	5-21	63
62	5-31	5-30	5-30	5-29	5-29	5-28	5-28	5-27	5-27	5-26	62
61	5-35	5-35	5-34	5-34	5-34	5-33	5-33	5-32	5-32	5-31	61
60	5-40	5-39	5-39	5-38	5-38	5-37	5-37	5-37	5-36	5-36	60
59	5-43	5-43	5-43	5-42	5-42	5-41	5-41	5-41	5-40	5-40	59
58	5-47	5-46	5-46	5-46	5-45	5-45	5-45	5-44	5-44	5-44	58
57	5-50	5-49	5-49	5-49	5-48	5-48	5-48	5-48	5-47	5-47	57
56	5-52	5-52	5-52	5-51	5-51	5-51	5-51	5-51	5-50	5-50	56
55	5-55	5-54	5-54	5-54	5-54	5-53	5-53	5-53	5-53	5-53	55
54	5-56	5-56	5-56	5-56	5-56	5-55	5-55	5-55	5-55	5-55	54
53	5-58	5-58	5-57	5-57	5-57	5-57	5-57	5-57	5-57	5-56	53
52	5-59	5-59	5-59	5-58	5-58	5-58	5-58	5-58	5-58	5-58	52
51	5-59	5-59	5-59	5-59	5-59	5-59	5-59	5-59	5-59	5-59	51
50	5-60	5-59	5-59	5-59	5-59	5-59	5-59	5-59	5-59	5-59	50

TOLERANCES OR PURE SEED VARIATIONS FOR NON-CHAFFY SEEDS IN DUPLICATE ANALYSIS TESTS ON THE WORKING SAMPLE.

Purity Value. %	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	Purity Value. %
100	0.60	—	—	—	—	—	—	—	—	—	100
99	0.79	0.77	0.75	0.73	0.71	0.69	0.67	0.65	0.63	0.61	99
98	1.00	0.98	0.96	0.94	0.92	0.90	0.88	0.86	0.83	0.81	98
97	1.18	1.16	1.14	1.12	1.10	1.08	1.06	1.05	1.04	1.01	97
96	1.36	1.34	1.33	1.31	1.29	1.27	1.25	1.23	1.21	1.20	96
95	1.55	1.52	1.50	1.48	1.46	1.45	1.44	1.42	1.40	1.38	95
94	1.72	1.71	1.69	1.67	1.65	1.63	1.62	1.60	1.58	1.56	94
93	1.90	1.88	1.86	1.85	1.83	1.81	1.79	1.78	1.76	1.74	93
92	2.07	2.05	2.03	2.02	2.00	1.98	1.96	1.95	1.93	1.91	92
91	2.23	2.22	2.20	2.18	2.17	2.15	2.13	2.12	2.10	2.08	91
90	2.40	2.38	2.36	2.35	2.33	2.31	2.30	2.28	2.27	2.25	90
89	2.55	2.54	2.52	2.51	2.49	2.47	2.46	2.44	2.43	2.41	89
88	2.71	2.68	2.67	2.66	2.65	2.63	2.62	2.60	2.58	2.57	88
87	2.86	2.84	2.83	2.81	2.80	2.78	2.77	2.75	2.74	2.72	87
86	3.00	2.99	2.97	2.96	2.95	2.93	2.92	2.90	2.89	2.87	86
85	3.15	3.13	3.12	3.10	3.09	3.07	3.06	3.05	3.03	3.02	85
84	3.28	3.27	3.26	3.24	3.23	3.21	3.20	3.19	3.17	3.16	84
83	3.42	3.40	3.39	3.38	3.36	3.35	3.34	3.32	3.31	3.30	83
82	3.55	3.53	3.52	3.51	3.50	3.48	3.47	3.46	3.44	3.43	82
81	3.67	3.66	3.65	3.64	3.62	3.61	3.60	3.59	3.57	3.56	81
80	3.80	3.78	3.77	3.76	3.75	3.73	3.72	3.71	3.70	3.68	80
79	3.91	3.90	3.89	3.88	3.87	3.85	3.84	3.83	3.82	3.81	79
78	4.03	4.02	4.00	3.99	3.98	3.97	3.96	3.95	3.94	3.92	78
77	4.14	4.13	4.12	4.10	4.09	4.08	4.07	4.06	4.05	4.04	77
76	4.24	4.23	4.22	4.21	4.20	4.19	4.18	4.17	4.16	4.15	76
75	4.35	4.33	4.32	4.31	4.30	4.29	4.28	4.27	4.26	4.25	75
74	4.44	4.43	4.42	4.41	4.40	4.39	4.38	4.37	4.36	4.35	74
73	4.54	4.53	4.52	4.51	4.50	4.49	4.48	4.47	4.46	4.45	73
72	4.63	4.62	4.61	4.60	4.59	4.58	4.57	4.56	4.56	4.55	72
71	4.71	4.70	4.70	4.69	4.68	4.67	4.66	4.65	4.64	4.64	71
70	4.80	4.79	4.78	4.77	4.76	4.75	4.75	4.74	4.73	4.72	70
69	4.87	4.87	4.86	4.85	4.84	4.83	4.83	4.82	4.81	4.80	69
68	4.95	4.94	4.93	4.93	4.92	4.91	4.90	4.90	4.89	4.88	68
67	5.02	5.01	5.00	5.00	4.99	4.98	4.98	4.97	4.96	4.95	67
66	5.08	5.08	5.07	5.06	5.06	5.05	5.04	5.04	5.03	5.02	66
65	5.15	5.14	5.13	5.13	5.12	5.11	5.11	5.10	5.10	5.09	65
64	5.20	5.20	5.19	5.19	5.18	5.17	5.17	5.16	5.16	5.15	64
63	5.26	5.25	5.25	5.24	5.24	5.23	5.23	5.22	5.21	5.21	63
62	5.31	5.30	5.30	5.29	5.29	5.28	5.28	5.27	5.27	5.26	62
61	5.35	5.35	5.34	5.34	5.34	5.33	5.33	5.32	5.32	5.31	61
60	5.40	5.39	5.39	5.38	5.38	5.37	5.37	5.37	5.36	5.36	60
59	5.43	5.43	5.43	5.42	5.42	5.41	5.41	5.41	5.40	5.40	59
58	5.47	5.46	5.46	5.46	5.45	5.45	5.45	5.44	5.44	5.44	58
57	5.50	5.49	5.49	5.49	5.49	5.48	5.48	5.48	5.47	5.47	57
56	5.52	5.52	5.52	5.51	5.51	5.51	5.51	5.51	5.50	5.50	56
55	5.55	5.54	5.54	5.54	5.54	5.53	5.53	5.53	5.53	5.53	55
54	5.56	5.56	5.56	5.56	5.56	5.55	5.55	5.55	5.55	5.55	54
53	5.58	5.58	5.57	5.57	5.57	5.57	5.57	5.57	5.57	5.56	53
52	5.59	5.59	5.59	5.58	5.58	5.58	5.58	5.58	5.58	5.58	52
51	5.59	5.59	5.59	5.59	5.59	5.59	5.59	5.59	5.59	5.59	51
50	5.60	5.59	5.59	5.59	5.59	5.59	5.59	5.59	5.59	5.59	50

TABEL 2 (b).

TOELAATBARE SPELING VIR VERSKILLE IN SUIWERSAAD BY DUPLIKAATONTLEDINGS VAN DIE WERKMUNSTER BY KAPAGTIGE SADE, INSLUITENDE *AGROSTIS*, *BROMUS*, *CHLORIS*, *DACTYLIS*, *DIGITARIA*, *EHRAHARTA*, *FESTUCA*, *PASPALUM*, *POA* EN *SETARIA* EN MENGSELS WAT MEER AS 50 PERSENT VAN HIERDIE SOORTE AFSONDERLIK OF GESAMENTLIK BEVAT.

Suiwerheids- waarde. %	0-00	0-10	0-20	0-30	0-40	0-50	0-60	0-70	0-80	0-90	Suiwerheids- waarde. %
100	0-60	—	—	—	—	—	—	—	—	—	100
99	0-79	0-77	0-75	0-73	0-71	0-69	0-67	0-65	0-63	0-61	99
98	1-00	0-98	0-96	0-94	0-92	0-90	0-88	0-86	0-83	0-81	98
97	1-21	1-19	1-17	1-15	1-12	1-10	1-08	1-07	1-06	1-03	97
96	1-41	1-39	1-38	1-35	1-33	1-31	3-29	1-27	1-24	1-23	96
95	1-62	1-59	1-57	1-54	1-52	1-51	1-50	1-48	1-45	1-43	95
94	1-82	1-81	1-78	1-76	1-74	1-71	1-70	1-68	1-66	1-63	94
93	2-03	2-00	1-98	1-97	1-95	1-92	1-90	1-87	1-86	1-84	93
92	2-23	2-21	2-18	2-17	2-15	2-12	2-10	2-09	2-06	2-04	92
91	2-43	2-41	2-39	2-36	2-35	2-33	2-30	2-28	2-27	2-24	91
90	2-64	2-61	2-59	2-57	2-55	2-52	2-51	2-49	2-47	2-45	90
89	2-83	2-81	2-79	2-77	2-75	2-72	2-71	2-69	2-67	2-65	89
88	3-03	3-01	2-99	2-97	2-95	2-93	2-91	2-89	2-86	2-85	88
87	3-23	3-20	3-19	3-16	3-15	3-12	3-11	3-08	3-07	3-04	87
86	3-42	3-40	3-37	3-36	3-35	3-32	3-31	3-28	3-27	3-24	86
85	3-62	3-59	3-58	3-55	3-54	3-51	3-50	3-48	3-46	3-44	85
84	3-80	3-78	3-77	3-74	3-73	3-70	3-69	3-67	3-65	3-63	84
83	4-00	3-97	3-95	3-94	3-91	3-90	3-88	3-86	3-84	3-83	83
82	4-18	4-16	4-14	4-13	4-11	4-08	4-07	4-05	4-03	4-01	82
81	4-36	4-35	4-33	4-32	4-29	4-27	4-26	4-24	4-21	4-20	81
80	4-56	4-53	4-51	4-49	4-48	4-46	4-44	4-42	4-40	4-38	80
79	4-73	4-71	4-69	4-68	4-66	4-63	4-62	4-60	4-59	4-57	79
78	4-92	4-90	4-87	4-85	4-83	4-82	4-80	4-79	4-77	4-74	78
77	5-09	5-07	5-05	5-03	5-01	5-99	5-98	5-96	4-94	4-93	77
76	5-25	5-24	5-22	5-20	5-19	5-17	5-15	5-14	5-12	5-10	76
75	5-43	5-40	5-39	5-37	5-35	5-34	5-32	5-30	5-29	5-27	75
74	5-59	5-57	5-56	5-54	5-52	5-50	5-49	5-47	5-45	5-44	74
73	5-76	5-74	5-73	5-71	5-69	5-67	5-66	5-64	5-63	5-61	73
72	5-92	5-90	5-89	5-87	5-85	5-83	5-82	5-80	5-80	5-78	72
71	6-07	6-05	6-05	6-03	6-01	6-00	5-98	5-96	5-94	5-94	71
70	6-24	6-22	6-20	6-18	6-16	6-15	6-14	6-12	6-11	6-09	70
69	6-37	6-37	6-35	6-33	6-32	6-30	6-29	6-28	6-26	6-24	69
68	6-53	6-51	6-49	6-49	6-47	6-45	6-43	6-43	6-41	6-39	68
67	6-67	6-65	6-64	6-63	6-61	6-59	6-59	6-57	6-55	6-53	67
66	6-80	6-80	6-78	6-76	6-76	6-74	6-72	6-71	6-71	6-68	66
65	6-95	6-93	6-91	6-91	6-89	6-87	6-86	6-84	6-84	6-82	65
64	7-07	7-06	7-04	7-04	7-02	7-00	7-00	6-98	6-97	6-95	64
63	7-20	7-18	7-18	7-16	7-15	7-13	7-13	7-11	7-09	7-09	63
62	7-32	7-30	7-30	7-28	7-27	7-26	7-25	7-23	7-23	7-21	62
61	7-43	7-43	7-41	7-40	7-40	7-38	7-36	7-35	7-35	7-33	61
60	7-56	7-54	7-53	7-51	7-51	7-49	7-48	7-48	7-46	7-45	60
59	7-65	7-65	7-64	7-62	7-62	7-60	7-59	7-59	7-57	7-56	59
58	7-76	7-74	7-74	7-73	7-71	7-71	7-70	7-68	7-68	7-67	58
57	7-86	7-84	7-83	7-83	7-82	7-80	7-80	7-79	7-77	7-77	57
56	7-94	7-94	7-93	7-93	7-91	7-90	7-90	7-89	7-87	7-87	56
55	8-04	8-02	8-02	8-01	8-01	7-99	7-98	7-97	7-97	7-96	55
54	8-11	8-11	8-10	8-10	8-09	8-07	8-06	8-06	8-05	8-05	54
53	8-20	8-19	8-17	8-17	8-16	8-16	8-15	8-14	8-14	8-12	53
52	8-27	8-26	8-26	8-24	8-23	8-23	8-22	8-21	8-21	8-20	52
51	8-32	8-32	8-31	8-31	8-30	8-30	8-29	8-28	8-28	8-27	51
50	8-40	8-37	8-37	8-36	8-36	8-35	8-35	8-34	8-34	8-33	50

TABLE 2 (b).

TOLERANCES OF PURE SEED VARIATIONS FOR CHAFFY SEEDS INCLUDING *AGROSTIS*, *BROMUS*, *CHLORIS*, *DACTYLIS*, *DIGITARIA*, *EHRHARTA*, *FESTUCA*, *PASPALUM*, *POA* AND *SETARIA* AND MISTURES CONTAINING THESE KINDS, SINGLY OR COMBINED, IN EXCESS OF 50 PER CENT, IN DUPLICATE ANALYSIS TEST, ON THE WORKING SAMPLE.

Purity Value. %	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	Purity Value. %
100	0.60	—	—	—	—	—	—	—	—	—	100
99	0.79	0.77	0.75	0.73	0.71	0.69	0.67	0.65	0.63	0.61	99
98	1.00	0.98	0.96	0.94	0.92	0.90	0.88	0.86	0.83	0.81	98
97	1.21	1.19	1.17	1.15	1.12	1.10	1.08	1.07	1.06	1.03	97
96	1.41	1.39	1.38	1.35	1.33	1.31	1.29	1.27	1.24	1.23	96
95	1.62	1.59	1.57	1.54	1.52	1.51	1.50	1.48	1.45	1.43	95
94	1.82	1.81	1.78	1.76	1.74	1.71	1.70	1.68	1.66	1.63	94
93	2.03	2.00	1.98	1.97	1.95	1.92	1.90	1.87	1.86	1.84	93
92	2.23	2.21	2.18	2.17	2.15	2.12	2.10	2.09	2.06	2.04	92
91	2.43	2.41	2.39	2.36	2.35	2.33	2.30	2.28	2.27	2.24	91
90	2.64	2.61	2.59	2.57	2.55	2.52	2.51	2.49	2.47	2.45	90
89	2.83	2.81	2.79	2.77	2.75	2.72	2.71	2.69	2.67	2.65	89
88	3.03	3.01	2.99	2.97	2.95	2.93	2.91	2.89	2.86	2.85	88
87	3.23	3.20	3.19	3.16	3.15	3.12	3.11	3.08	3.07	3.04	87
86	3.42	3.40	3.37	3.36	3.35	3.32	3.31	3.28	3.27	3.24	86
85	3.62	3.59	3.58	3.55	3.54	3.51	3.50	3.48	3.46	3.44	85
84	3.80	3.78	3.77	3.74	3.73	3.70	3.69	3.67	3.65	3.63	84
83	4.00	3.97	3.95	3.94	3.91	3.90	3.88	3.86	3.84	3.83	83
82	4.18	4.16	4.14	4.13	4.11	4.08	4.07	4.05	4.03	4.01	82
81	4.36	4.35	4.33	4.32	4.29	4.27	4.26	4.24	4.21	4.20	81
80	4.56	4.53	4.51	4.49	4.48	4.46	4.44	4.42	4.41	4.38	80
79	4.73	4.71	4.69	4.68	4.66	4.63	4.62	4.60	4.59	4.57	79
78	4.92	4.90	4.87	4.85	4.83	4.82	4.80	4.79	4.77	4.74	78
77	5.09	5.07	5.05	5.03	5.01	4.99	4.98	4.96	4.94	4.93	77
76	5.25	5.24	5.22	5.20	5.19	5.17	5.15	5.14	5.12	5.10	76
75	5.43	5.40	5.39	5.37	5.35	5.34	5.32	5.30	5.29	5.27	75
74	5.59	5.57	5.56	5.54	5.52	5.50	5.49	5.47	5.45	5.44	74
73	5.76	5.74	5.73	5.71	5.69	5.67	5.66	5.64	5.63	5.61	73
72	5.92	5.90	5.89	5.87	5.85	5.83	5.82	5.80	5.80	5.78	72
71	6.07	6.05	6.05	6.03	6.01	6.00	5.98	5.96	5.94	5.94	71
70	6.24	6.22	6.20	6.18	6.16	6.15	6.14	6.12	6.11	6.09	70
69	6.37	6.37	6.35	6.33	6.32	6.30	6.29	6.28	6.26	6.24	69
68	6.53	6.51	6.49	6.49	6.47	6.45	6.43	6.43	6.41	6.39	68
67	6.67	6.65	6.64	6.63	6.61	6.59	6.59	6.57	6.55	6.53	67
66	6.80	6.80	6.78	6.76	6.76	6.74	6.72	6.71	6.71	6.68	66
65	6.95	6.93	6.91	6.91	6.89	6.87	6.86	6.84	6.84	6.82	65
64	7.07	7.06	7.04	7.04	7.02	7.00	7.00	6.98	6.97	6.95	64
63	7.20	7.18	7.18	7.16	7.15	7.13	7.13	7.11	7.09	7.09	63
62	7.32	7.30	7.30	7.28	7.27	7.26	7.25	7.23	7.23	7.21	62
61	7.43	7.43	7.41	7.40	7.40	7.38	7.36	7.35	7.35	7.33	61
60	7.56	7.54	7.53	7.51	7.51	7.49	7.48	7.48	7.46	7.45	60
59	7.65	7.65	7.64	7.62	7.62	7.60	7.59	7.59	7.57	7.56	59
58	7.76	7.74	7.74	7.73	7.71	7.71	7.70	7.68	7.68	7.67	58
57	7.86	7.84	7.83	7.83	7.82	7.80	7.80	7.79	7.77	7.77	57
56	7.94	7.94	7.93	7.93	7.91	7.90	7.90	7.89	7.87	7.87	56
55	8.04	8.02	8.02	8.01	8.01	7.99	7.98	7.97	7.97	7.96	55
54	8.11	8.11	8.10	8.10	8.09	8.07	8.06	8.06	8.05	8.05	54
53	8.20	8.19	8.17	8.17	8.16	8.16	8.15	8.14	8.14	8.12	53
52	8.27	8.26	8.26	8.24	8.23	8.23	8.22	8.21	8.21	8.20	52
51	8.32	8.32	8.31	8.31	8.30	8.30	8.29	8.28	8.28	8.27	51
50	8.40	8.37	8.37	8.36	8.36	8.35	8.35	8.34	8.34	8.33	50

TABEL 3.

TOETSMETODES VIR ONTKIEMING.

Soort saad.	Kiemmedium.	Tempera- tuur °C.	Lig.	Eerste teldae.	Finale teldae.	Vars en/of rustende saad.
<i>Agrostis alba</i>	TP	20-30	L	5	10	Voorverkoel.
<i>Allium porrum</i> and <i>Allium cepa</i>	BP, TP	20	—	6	12	—
<i>Atriplex semi-baccata</i>	TP, S	20-30	—	7	21	—
<i>Beta vulgaris</i>	BP, TP, S, V	20-30	—	3	14	—
<i>Brassica campestris</i>	TP	20-30	L	3	7	—
<i>Brassica napus</i> var. <i>biennis</i>	TP	20-30	—	3	7	—
" <i>oleracea</i> var. <i>botrytis</i>	TP	20-30	—	3	10	—
" " var. <i>capitata</i>	TP	20-30	—	3	10	—
" " var. <i>caulorapa</i>	TP	20-30	—	3	10	—
" " var. <i>acephala</i>	TP	20-30	—	3	10	—
" " var. <i>gemmifera</i>	TP	20-30	—	3	7	—
" <i>rapa</i>	TP	20-30	—	3	7	—
<i>Bromus catharticus</i>	TP, S, V	10-30	L	7	28	S en V by 15°C.
<i>Bromus inermis</i>	TP	20-30	L	6	14	—
<i>Chloris gayana</i>	TP	20-30	L	6	14	—
<i>Cichorium endivia</i>	TP	20-30	L	5	14	KNO ₃ hoë vogtigheidspeil wenslik.
<i>Citrullus vulgaris</i>	BP, S, V	20-30	—	4	14	—
<i>Cucumis sativus</i>	BP, S, V	20-30	—	4	28	—
<i>Cucumis melo</i>	BP, S, V	20-30	—	4	8	—
<i>Cucurbita maxima</i>	BP, S, V	20-30	—	4	7	—
" <i>moschata</i>	BP, S, V	20-30	—	4	7	—
" <i>pepo</i>	BP, S, V	20-30	—	4	7	—
<i>Dactylis glomerata</i>	TP	20-30	L	7	21	—
<i>Daucus carota</i>	TP	20-30	—	7	21	—
<i>Digitaria</i> spp.....	TP	20-30	—	7	21	—
<i>Ehrharta calycina</i>	TP, S	20-30	—	7	21	—
<i>Eragrostis</i> spp.....	TP	20-30	—	3	7	—
<i>Festuca arundinacea</i>	TP	20-30	L	5	14	—
" <i>pratensis</i> (<i>F. elatior</i>).....	TP	20-30	L	5	14	—
" <i>rubra</i>	TP	15-25	L	7	21	—
<i>Lactuca sativa</i>	TP	20	L	3	7	Voorverkoel.
<i>Lespedeza stipulacea</i>	BP, S, V	20-35	—	5	14	—
<i>Lolium multiflorum</i>	TP	20-30	L	5	14	KNO ₃ , toets by 10-30°C.
" <i>perenne</i>	TP	20-30	L	5	14	KNO ₃ , toets by 10-30°C.
" <i>lohiaceum</i>	TP	20-30	L	5	14	KNO ₃ , toets by 10-30°C.
<i>Lupinus albus</i>	BP, S, V	20	—	4	10	—
" <i>angustifolius</i>	BP, S, V	20	—	4	10	—
" <i>luteus</i>	BP, S, V	20	—	4	10	—
<i>Lycopersicon esculentum</i>	TP	20-30	—	5	14	KNO ₃ .
<i>Medicago sativa</i>	TP	20	—	4	7	—
<i>Ornithopus sativus</i>	TP	20	—	7	14	—
<i>Paspalum dilatatum</i>	TP	20-35	L	3	21	KNO ₃ .
<i>Paspalum urvillei</i>	TP	20-35	L	3	21	KNO ₃ .
<i>Pastinaca sativa</i>	TP, BP	20-30	—	6	28	—
<i>Phalaris arundinacea</i>	TP	20-30	L	5	21	KNO ₃ .
<i>Phalaris tuberosa</i>	TP	20-30	L	7	28	KNO ₃ .
<i>Phaseolus vulgaris</i>	BP, S, V	20-30	—	5	9	—
<i>Pisum sativum</i>	BP, S, V	20	—	5	8	—
<i>Poa pratensis</i>	TP	15-30	L	7	21	Voorverkoel.
<i>Raparus sativus</i>	TP	20-30	—	4	6	—
<i>Setaria sphacelata</i>	BP, TP	20-30	—	4	10	—
<i>Solanum melongena</i> var. <i>esculentum</i>	TP	20-30	—	7	14	—
<i>Sorghum almum</i>	TP, BP, S, V	20-30	D	4	10	Voorverkoel.
<i>Sorghum sudanense</i>	TP, BP, S, V	20-30	D	4	10	Voorverkoel.
<i>Trifolium</i> spp.....	TP, BP	20-30	—	3	7	Toets by 15°C.
<i>Vicia faba</i>	BP, S, V	18	—	4	14	Voorverkoel.
<i>Vicia sativa</i>	BP, S, V	20	—	5	14	—
<i>Vicia villosa</i>	BP, S, V	20	—	5	14	—
<i>Zea mays</i> var. <i>saccharata</i>	BP, S, V	20-30	—	4	7	—

VERDUIDELIKINGS.

1. Waar alternatiewe metodes of toetsvoorskrifte aangedui word, kan albei toegepas word.
2. BP = tussen papier; TP = bo-op papier; S = in sand of grond; V = vermikuliet.
3. Temperatuur: Die kiemingstemperatuur is die temperatuur by die saadvlak. 'n Enkele getal dui 'n konstante temperatuur aan. Twee getalle wat met 'n koppelteken verbind is, dui 'n wisseltemperatuur aan; die toetsmonster word by die eerste temperatuur vir ongeveer 16 uur en by die tweede temperatuur vir ongeveer 8 uur per dag gehou. Indien toetsmonsters nie oor naweke of vakansiedae aan wisseltemperatuur onderwerp word nie, moet hulle oor sodanige periode by die laagste temperatuur gehou word.
4. Die letter L dui aan dat lig en D dat donkerte vereis word; die strepie dui aan dat dit nie bekend is of lig nodig is nie.
5. Die getal dae waarna die eerste telling moet geskied, is by benadering en 'n afwyking van 1 tot 3 dae word toegelaat.
6. Waar KNO₃ aangedui is, word 'n 0-2-persent oplossing gebruik. Dit word voorberei deur 2 gram kaliumnitraat in 1,000 ml. water op te los. Die kiemmedium word by die aanvang van die toets met die kaliumnitraatoplossing deurweek maar daarna word water gebruik vir vogtigting.
7. Tensy anders aangedui, moet saad teen 5°C. of 10°C. vir 5 tot 7 dae voorverkoel word. Tensy anders aangedui, is die voorverkoelingsperiode nie ingesluit nie by die ontkiemingsperiode wat in hierdie tabel opgegee word.

TABLE 3.
METHODS OF TESTING FOR GERMINATION.

Kind of Seed.	Substrata.	Temperature °C.	Light.	First Count Days.	Final Count Days.	Fresh and/or Dormant Seed.
<i>Agrostis alba</i>	TP	20-30	L	5	10	Pre-chill.
<i>Allium porrum</i> and <i>Allium cepa</i>	BP, TP	20	—	6	12	—
<i>Atriplex semi-baccata</i>	TP, S	20-30	—	7	21	—
<i>Beta vulgaris</i>	BP, TP, S, V	20-30	—	3	14	—
<i>Brassica campestris</i>	TP	20-30	L	3	17	—
<i>Brassica napus</i> var. <i>biennis</i>	TP	20-30	—	3	7	—
" <i>oleracea</i> var. <i>botrytis</i>	TP	20-30	—	3	10	—
" " var. <i>capitata</i>	TP	20-30	—	3	10	—
" " var. <i>caulorapa</i>	TP	20-30	—	3	10	—
" " var. <i>acephala</i>	TP	20-30	—	3	10	—
" " var. <i>gemmifera</i>	TP	20-30	—	3	10	—
" <i>rapa</i>	TP	20-30	—	3	7	—
<i>Bromus catharticus</i>	TP, S, V	10-30	L	7	28	S and V at 15°C.
<i>Bromus inermis</i>	TP	20-30	L	6	14	—
<i>Chloris gayana</i>	TP	20-30	L	6	14	—
<i>Cichorium endiv.</i>	TP	20-30	L	5	14	KNO ₃ high moisture level desirable.
<i>Citrullus vulgaris</i>	BP, S, V	20-30	—	4	14	—
<i>Cucumis sativus</i>	BP, S, V	20-30	—	4	18	—
<i>Cucumis melo</i>	BP, S, V	20-30	—	4	8	—
<i>Cucurbita maxima</i>	BP, S, V	20-30	—	4	7	—
" <i>moschata</i>	BP, S, V	20-30	—	4	7	—
" <i>pepo</i>	BP, S, V	20-30	—	4	7	—
<i>Dactylis glomerata</i>	TP	20-30	L	7	21	—
<i>Daucus carota</i>	TP	20-30	—	7	21	—
<i>Digitaria</i> spp.....	TP	20-30	—	7	21	—
<i>Ehrharta calycina</i>	TP, S	20-30	—	7	21	—
<i>Eragrostis</i> spp.....	TP	20-30	—	3	7	—
<i>Festuca arundinacea</i>	TP	20-30	L	5	14	—
" <i>pratensis</i> (F. <i>elatior</i>).....	TP	20-30	L	5	14	—
" <i>rubra</i>	TP	15-25	L	7	21	—
<i>Lactuca sativa</i>	TP	20	L	3	7	Pre-chill.
<i>Lespedeza stipulacea</i>	BP, S, V	20-35	—	5	14	—
<i>Lolium multiflorum</i>	TP	20-30	L	5	14	KNO ₃ test at 10-30°C.
" <i>perenne</i>	TP	20-30	L	5	14	KNO ₃ test at 10-30°C.
" <i>loliaceum</i>	TP	20-30	L	5	14	KNO ₃ test at 10-30°C.
<i>Lupinus albus</i>	BP, S, V	20	—	4	10	—
" <i>angustifolius</i>	BP, S, V	20	—	4	10	—
" <i>luteus</i>	BP, S, V	20	—	4	10	—
<i>Lycopersicon esculentum</i>	TP	20-30	—	5	14	KNO ₃ .
<i>Medicago sativa</i>	TP	20	—	4	7	—
<i>Ornithopus sativus</i>	TP	20	—	7	14	—
<i>Paspalum dilatatum</i>	TP	20-35	L	3	21	KNO ₃ .
<i>Paspalum urvillei</i>	TP	20-35	L	3	21	KNO ₃ .
<i>Pastinaca sativa</i>	TP, BP	20-30	—	6	28	—
<i>Phalaris arundinacea</i>	TP	20-30	L	5	21	KNO ₃ .
<i>Phalaris tuberosa</i>	TP	10-30	L	7	28	KNO ₃ .
<i>Phaseolus vulgaris</i>	BP, S, V	20-30	—	5	9	—
<i>Pisum sativum</i>	BP, S, V	20	—	5	8	—
<i>Poa pratensis</i>	TP	15-30	L	7	21	Pre-chill.
<i>Raphanus sativus</i>	TP	20-30	—	4	6	—
<i>Setaria sphacelata</i>	BP, TP	20-30	—	4	10	—
<i>Solanum melongena</i> var. <i>esculentum</i>	TP	20-30	—	7	14	—
<i>Sorghum alnum</i>	TP, BP, S, V	20-30	D	4	10	Pre-chill.
<i>Sorghum sudanense</i>	TP, BP, S, V	20-30	D	4	10	Pre-chill.
<i>Trifolium</i> spp.....	TP, BP	20-30	—	3	7	Test at 15°C.
<i>Vicia faba</i>	BP, S, V	18	—	4	14	Pre-chill.
<i>Vicia sativa</i>	BP, S, V	20	—	5	14	—
<i>Vicia villosa</i>	BP, S, V	20	—	5	14	—
<i>Zea mays</i> var. <i>saccharata</i>	BP, S, V	20-30	—	4	7	—

EXPLANATIONS.

- Where alternate methods or conditions are indicated, either may be used.
- BP = between paper; TP = top of paper; S = in sand or soil; V = vermiculite.
- Temperature: The germination temperature is the temperature at the seed level. A single numeral indicates a constant temperature. Two numerals separated by a dash indicate an alternation of temperature; the test is held at the first temperature for approximately 16 hours and at the second temperature for approximately 8 hours per day. If tests are not subjected to alternating temperatures over week-ends and on holidays, they are to be held at the lower temperature during such time.
- The letter L indicates that light and D that darkness is required; the dash indicates that light is not known to be necessary.
- The number of days stated for the first count is approximate and a deviation of 1 to 3 days is permitted.
- Where KNO₃ is indicated a 0.2 per cent solution is used. It is prepared by dissolving 2 grams of potassium nitrate in 1,000 ml. of water. The substratum is saturated with the potassium nitrate solution when the test is begun, but water is used for moistening thereafter.
- Seeds shall be pre-chilled at 5° or 10° C. for 5 to 7 days unless otherwise indicated. The pre-chilling period is not included in the germination period given in this table unless otherwise specified.

DERDE AANHANGSEL.

SERTIFIKAAT VAN INSPEKTEUR WAT MONSTER VAN
SAAD NEEM.

[Ooreenkomstig artikel 15 (2) van die Wet op Misstowwe, Veevoedsel, Saad en Middels, 1947 (No. 36 van 1947).]

Ek, (volle naam) _____
'n behoorlik aangestelde inspekteur ingevolge artikel veertien van die
Wet op Misstowwe, Veevoedsel, Saad en Middels (No. 36 van 1947),
sertifiseer hierby dat:—

(1) Ek op _____ 'n monster van _____
saad te _____

_____ geneem het in teenwoordigheid van ondergenoemde getuie

(2) Ek genoemde monster verseël het met seël No. _____
en dit as volg gemerk/geëtiketteer het _____

(3) Genoemde monster vir ondersoek, ontleding of toets op
_____ gestuur is aan die Saadontleder

(4) Genoemde monster verteenwoordigend is van 'n saadlot
waarop die volgende besonderhede van toepassing is:—

(a) Aantal houe_____

(b) Gewig saad _____ lb.

* (c) Houers nie gemerk of geëtiketteer ooreenkomstig ver-
eistes van Wet No. 36 van 1947 nie of

* (d) Houers as volg gemerk of geëtiketteer:—

(i) Naam en adres van verkoper _____

(ii) Soort en variëteit saad _____

(iii) Graad _____

(iv) Suiwerheid..... %

(v) Ontkieming..... %

(vi) Gehalte lewende saad.... %

(vii) Verpakkingskodenommer _____

(viii) Maand en jaar waarin ontkieming van saad
bepaal is _____

(ix) Sertifikaatnommer _____

(e) Toestand van houe_____

(f) _____

(5) _____

Handtekening van getuie.

Handtekening van Inspekteur.

Plek _____

Datum _____

* Skrap wat nie van toepassing is nie.

THIRD ANNEXURE.

CERTIFICATE OF INSPECTOR TAKING THE SAMPLE OF
SEED.

[In terms of Section 15 (2) of the Fertilizers, Farm Feeds, Seeds
and Remedies Act, 1947 (No. 36 of 1947).]

I, (full name) _____
a duly appointed inspector in terms of section fourteen of the Ferti-
lizers, Farm Feeds, Seeds and Remedies Act, 1947 (No. 36 of 1947),
do hereby certify that:—

(1) On _____ I took a sample of _____
seed at _____

_____ in the presence of the undermentioned witness _____

(2) I have sealed the said sample under seal No. _____ and
marked/labelled it as follows: _____

(3) On _____ the said sample was forwarded for
examination, analysis or test to the Seed Analyst _____

(4) The said sample is representative of a seed lot to which the
undermentioned particulars apply:—

(a) Number of containers _____

(b) Weight of seed _____ lb.

* (c) Containers not marked or labelled in accordance with
the requirements of the Act, No. 36 of 1947 or

* (d) Containers marked or labelled as follows:—

(i) Name and address of seller _____

(ii) Kind and variety of seed _____

(iii) Grade _____

(iv) Purity..... %

(v) Germination..... %

(vi) Live Seed Content.... %

(vii) Packing Code Number _____

(viii) Month and year during which the germination
of the seed was determined _____

(ix) Certificate No. _____

(e) Condition of containers _____

(f) _____

(5) _____

Signature of Witness.

Signature of Inspector.

Place _____

Date _____

* Delete whichever is not applicable.

VIERDE AANHANGSEL.

SERTIFIKAAT VAN ONTLEDING OF TOETS VAN SAAD-MONSTER DEUR ONTLEDER.

[Ingevolge artikel 15 (3) van die Wet op Misstawwe, Veevoedsel, Saad en Middels, 1947.]

Ek, (volle naam) _____
 'n behoorlik aangestelde ontleder ingevolge artikel veertien van die Wet op Misstawwe, Veevoedsel, Saad en Middels, 1947 (Wet No. 36 van 1947) verklaar hierby onder eed dat—

(1) ek op (datum) _____ 'n monster van (soort en variëteit saad soos aangedui deur verkoper) _____ van (naam van inspekteur) _____ per (hand, pos, spoor) _____ vir ontleding en/of toets ontvang het;

(2) die monster soos volg geëtiketteer, verseël en gemerk was _____

(3) ek die monster ontleed en/of getoets en die volgende resultate verkry het:—

A. Soort en variëteit saad soos vasgestel _____

B. (i) Suiwersaad..... %
 (ii) Onaktiewe stof..... %
 (iii) Ander gewassade..... %
 (iv) Onkruidsade..... %
 (v) Ander..... %

TOTAAL..... 100%

C. (i) Normaal ontkiem..... %
 (ii) Harde sade..... %
 (iii) Gesond, nie ontkiem nie... %
 (iv) Muf..... %
 (v) Abnormaal..... %
 (vi) Ander..... %

TOTAAL..... 100%

D. Gehalte lewende saad..... %

(4) _____

Handtekening van ontleder.

Beëdig voor my te _____ op hede die _____ dag van _____ 19____. Die deponent verklaar dat hy met die inhoud van hierdie dokument bekend is en dit verstaan.

Vrederegter of Kommissaris van Ede.

FOURTH ANNEXURE.

CERTIFICATE OF RESULT OF ANALYSIS OR TEST OF SAMPLE OF SEED BY ANALYST.

[In terms of Section 15 (3) of the Fertilizers, Farm Feeds, Seeds and Remedies Act, 1947.]

I, (full name) _____
 a duly appointed analyst in terms of section fourteen of the Fertilizers, Farm Feeds, Seeds and Remedies Act, 1947 (Act No. 36 of 1947) do hereby make oath and state that—

(1) on (date) _____ I received a sample of (kind and variety seed as stated by seller) _____ from (name of inspector) _____ by (post, rail or hand) _____ for analysis and/or test;

(2) the sample was labelled, sealed and marked as follows:— _____

(3) I have analysed and/or tested the sample with the following results:—

A. Established kind and/or variety of seed _____

B. (i) Pure seed..... %
 (ii) Inert matter..... %
 (iii) Other crop seeds..... %
 (iv) Weed seeds..... %
 (v) Other..... %

TOTAL..... 100%

C. (i) Normally germinated..... %
 (ii) Hard seeds..... %
 (iii) Healthy, not germinated... %
 (iv) Mouldy..... %
 (v) Abnormal..... %
 (vi) Other..... %

TOTAL..... 100%

D. Live seed content..... %

(4) _____

Signature of Analyst.

Sworn to before me at _____ this _____

day of _____ 19____. The deponent has declared that he knows and understand the contents of this affidavit.

Justice of the Peace/Commissioner of Oaths.

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