



agriculture, forestry & fisheries

Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

GUIDELINES FOR THE REGISTRATION OF SEED TREATMENTS IN SOUTH AFRICA

**Issued by the Registrar: Act No. 36 of 1947, Private Bag
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1. INTRODUCTION

The purpose of these guidelines is to provide guidance on how to meet data requirements for registration purposes of seed treatment products. These guidelines must be read in conjunction with any other guidelines published or endorsed by the Registrar of Act 36 of 1947 to comply with all the requirements of seed treatment products. All seed treatments products must be used as directed on the labels approved by the Registrar.

Seed treatment is the use and application of biological, physical and chemical products, utilizing different techniques onto the seed, with the aim of providing seed and plant protection, and improving the establishment of healthy crops.

Seed treatment may also be used to describe both the method and the technique used for seed treatment. The correct use of specific products and techniques used for seed treatment can improve the growth environment for the seed, seedlings, and young plants, improve the adherence of chemical or biological products to the seed, reduce chemical dust and serve to add colour. Seed treatment application methods may differ from basic dressing, to coating and pelleting (encrusting) of seeds.

It is a requirement to apply for an import or export permit when seed treated with pesticides is brought in or exported from South Africa for commercial or experimental purposes. The procedure as published on the Department: Agriculture, Forestry and Fisheries (DAFF) website should be followed. Field trials initiated from the 1ST of August 2019 should follow these guidelines.

2. SEED TREATMENT

A seed treatment can be classified as the application of chemical ingredients and/or biological organisms to seed to repel, suppress or control plant pests i.e. insects and pathogens that attack seed, seedlings and plants.

Enhancing seed includes:

- Breaking certain seed dormancies by pre-germinating the seeds.
- Coating seeds (pelleting, film coating) to improve the sowing of the seeds.
- Including additives to the seed that can stimulate or enhance the growth of the plant.

3. DATA REQUIREMENTS

3.1 General

The Seed Treatment Guideline must be read in conjunction with the following current guidelines published by Department: Agriculture, Forestry and Fisheries.

- *“GUIDELINES ON THE DATA AND DOCUMENTS REQUIRED FOR REGISTRATION OF AGRICULTURAL REMEDIES IN SOUTH AFRICA”*
- *“GUIDELINES FOR REGISTRATION OF ADJUVANTS”*
- *“GUIDELINES FOR REGISTRATION OF GROUP 3 FERTILIZERS”*
- *“GUIDELINES ON RESIDUE STUDY REQUIREMENTS FOR REGISTRATION OF AGRICULTURAL REMEDIES AND SETTING OF MAXIMUM RESIDUE LIMITS (MRL'S) IN SOUTH AFRICA”.*

Trials should be set up in the field area or under conditions in which the crop will be grown commercially. The trial should be conducted across geographical areas where the crop is commonly grown, across different years or seasons. Alternatively, trials can be conducted within the same season, if done in different bioclimatic areas, where different climatic conditions are prevalent.

Different parameters may be used to measure effectiveness of the chemical used in combating the pest or proving any effect desired. Various parameters such as disease incidence, symptom severity per plant/plot and indirect measurements such as height, dry weight, yield and quality factors of the harvested portion of the crop and indexes may be used.

3.2 Efficacy

3.2.1 Field trials

A minimum of three successful field trials are required, in areas where target pests are more likely to occur. The layout of the trials must comply with the relevant statistical design. Efficacy evaluation techniques must give the best indication of the performance of the product against the pest targeted e.g. incidence and/or severity rating data scales can be used depending on the preferred method. Current prevailing scientific principles should always be followed when conducting experiments or trials. Where a combination of various pesticides is made, results showing the effectiveness of such mixes must be submitted.

3.2.2 Trials under controlled conditions

Seed-borne diseases and seed or seedling attacking insects are especially difficult to prove effective control using conventional field trials. In these cases, it is more practical to conduct one efficacy trial evaluating seed treatments under controlled conditions. However, trials conducted under controlled conditions must form part of a series of micro-plots field trials where two (2) efficacy and a minimum of three (3) crop safety/phytotoxicity trials. Efficacy trials can also be used to evaluate crop safety/phytotoxicity effects.

An artificially inoculated pasteurized substrate or pest/disease infestation/infection may be used under controlled or field conditions. Naturally infested/infected humus-rich field soils representative of the proposed area of use can also be used, collected from the top layer of fields where the concerned was previously cultivated. It should be tested before the trial to identify the seedling pathogen/pest present.

The treatment plots must be laid out in a suitable statistical design with no less than four replicates satisfying the 12 degrees of freedom requirement. The plot size could be for example one seed tray, micro plot or pot containing 5 – 50 seeds depending of the crop (larger number of seeds for smaller crops).

3.2.3 Data extrapolation

- For minor crops both local and or international data is acceptable, provided the data is generated under similar environmental conditions, using the same formulation, same loading and the same Good Agricultural Practices (GAP). However, the registrar may require limited additional data to be generated under South African Condition as confirmatory studies.
- In situations where the applicant wants to submit efficacy/residues data generated outside of South Africa, the applicant must apply for data waiver before such an application is made.

3.2.4 New invasive pests, diseases and weeds

In situations where a targeted indication cannot be evaluated under field conditions e.g. karnal bunt in wheat. Then laboratory/glasshouse or quarantined experiments conducted by a local research organization, universities or any other accredited laboratory can be used to conduct such experiments/trials. Overseas or data generated outside of South

Africa under similar climatic conditions will be accepted for efficacy and residue data extrapolation purposes and can be used to gain conditional registrations. However, crop safety/phytotoxicity and confirmatory residue studies not exceeding the minimum number required must be done in South Africa. For more details, refer to the emergency registration protocol. It is recommended the applicant must apply for data waiver for efficacy/residues data to be accepted before any application is lodged with the office of the Registrar.

3.2.5 Seed storage trials

All potential seed protectants applied directly to seed must be tested in a laboratory replicated trial, with a standard product as reference, against the species that will be listed on the label. The period of protection must be specified on the label. Beetles and moths should be tested. One (1) laboratory trial is sufficient for registration purposes. For efficacy there is no need to test the highest rate of 2x.

3.3 Phytotoxicity

The experimental crop should be assessed for phytotoxicity effects following the treatment of seed. The type or nature and extent of negative effects should be recorded. Evidence of crop damage may be demonstrated by showing emergent studies. The frequency and intensity of damage can be expressed in absolute or percentage estimates. In most cases, symptoms of phytotoxicity or damage can be described as i.e. reduced germination, stunting, necrosis, chlorosis and deformation that may be observed after germination. The effect on yield must also be assessed. Phytotoxicity studies must include both 1x and 2x rates for both generic and new claims.

In addition to the above-mentioned field trials germination studies as prescribed in the International Seed Testing Association (ISTA) protocol must also be performed to confirm seed safety.

Annexure 1. Table 4 of the Plant improvement act of 1976 describes the provisions relating to seed and seed samples for specific crops. These provisions should be adhered to when conducting phytotoxic trials seed production varieties.

3.4 Dosage rates

The chemicals tested should reflect a rate-range that must include levels above or below commercial use in case of new claims. This will serve to determine the commercial use rate.

3.5 Edaphic characteristics

Soil characteristics must be recorded immediately after planting, and soil analysis report detailing information such as pH, organic matter, cation exchange capacity (CEC) and soil classification should be submitted.

3.6 Residues

Refer to the current GUIDELINES ON RESIDUE STUDY REQUIREMENTS FOR REGISTRATION OF AGRICULTURAL REMEDIES AND SETTING OF MAXIMUM RESIDUE LIMITS (MRL'S) IN SOUTH AFRICA.

(The CODEX Crop Grouping Principles should be noted here to aid manufacturers in setting up their protocols) = The documents are being developed with updated crops groups.

- If an active ingredient is registered as a foliar spray, and the dose rate of the seed treatment for that active ingredient is equal to the rate for the foliar spray, the seed treatment will be exempt from residues data. However, if there are any doubts, the applicant must apply for residues data waiver before any application is lodged with the office of the Registrar and provide scientific reasons why such an application should be considered.
- For minor crops both local and or international data is acceptable, provided the data is generated under similar environmental conditions, using the same formulation, same loading and the same Good Agricultural Practices (GAP). However, the registrar may require limited additional data to be generated under South African conditions as confirmatory studies. In situations where the applicant wants to submit residues data generated outside of South Africa, the applicant

must apply for data waiver before such an application is made.

- Residue data may be extrapolated from one crop to the next using the CODEX crop groupings.
- Additional residues data required will be specified by the Registrar if required to be done in South Africa where international data has been presented per crop grouping.

3.7 Adjuvants (colourants, polymers and pelleting etc.)

Refer to the current Guidelines FOR REGISTRATION OF ADJUVANTS.

In addition to the prescribed field trials to determine phytotoxicity effects and compatibility, adjuvants such as polymers for dust reduction must be further evaluated to test the dust reduction. The Heubach dust meter could be used to measure the effectiveness of dust reduction.

3.8 Minor crop/use

Refer to the current REGISTRATION GUIDELINES FOR MINOR USES (MINOR CROPS) IN SOUTH AFRICA.

3.9 Biological products containing living microorganisms as active ingredients.

In terms of crop safety, all biological products must adhere to requirements as stipulated in section 3.3. Although, beneficial microorganisms will not negatively impact seed viability, it must be proven that the co-formulants in the formulations are safe. For all efficacy requirements refer to the data requirement guidelines for the registration of Group 3 bio-fertilizers or Biological remedies.

4. TRIAL REPORTS

The trial report should be presented in a format that includes statistically analysed data, and the raw data may also be included in the report. Tables or graphs should be used to demonstrate efficacy or phytotoxicity.

When presenting data, all the codes used (e.g. in data column headers) relating to efficacy, phytotoxicity, and scientific abbreviations of weeds and crops, must be clearly explained. The following should be included in trial headers when reports are presented for registration purposes i.e. cultivar/variety name, weed species name, application date, evaluation date, timing of application, phytotoxicity characteristics, application or treatment carrier (e.g. water), crop growth stage at application, and evaluation intervals.

Efficacy and phytotoxicity data must include:

- Planting date
- Scientific name of the crop and pest studied
- Date/interval after application (days after planting and treatment)
- Assessment date
- Rating scale
- Crop and pest growth stages key (e.g. Zadock, BBCH etc.)
- Efficacy and phytotoxicity assessment rating method;
- Sample size and plot size
- Harvest date
- Yield (e.g. kg/ha)

Each report should include an overall summary based on efficacy and crop safety data. The summary should highlight the important aspects of the trial findings. Tables and graphs can be used to summarize data and should be cross-referenced to the reports in the main application. It is advisable to supply an explanation as to how the data support the claims on the label. It may be useful to annotate the draft label to indicate where to find the sections in the summary or results tables and graphs that support the individual claims on the label.

5. PHYSICAL COMPATIBILITY WITH OTHER PRODUCTS

Where the proposed label includes recommendation for use together with other products, whether applied simultaneously or sequentially, such recommendation should be tested during the trial phase and must comply with registration requirements. Where third party products are used, consent letters from third party registration holders must be submitted

to support endorsement of tank mixing products and vice versa. Where third party products are used, letters of consent from third party manufactures must be submitted.

6. REFERENCES

1. Advances in seed treatment technology, Denis C. Mc.Gee, Professor of plant pathology, Seed Science Center, Iowa University, Ames, IA 50011, USA, 1995.
2. Efficacy guideline 401: Efficacy testing of apple and pear fungicides and insecticides in the UK, 2008.
3. European Seed Association: Revision of Directive 91/414/EC – The European seed industry's view on a future of EU regulation on plant protection products and seed treatments.
4. EPPO Standards PP 1, 2nd Edition, volume 2, Efficacy evaluation of fungicides and bactericides, 2004.
5. EPPO Standards PP 1/125(4), Seed treatments against seedling diseases (trials under controlled conditions, 2012).
6. EPPO Standards PP 1/19(4), Efficacy evaluations of fungicides: Seed-borne cereal fungi, 2003.
7. European Seed Association, Revision of Directive 91/414/EC, June 2006.
8. Guidelines for seed treatment registration trials and for labeling of treated seed (Approved by the Registrar, Act 36 of 1947, Croplife SA, SANSOR), 1995).
9. Guidelines on the data and documents required for registration of agricultural remedies in South Africa. (Approved by the Registrar, Act 36 of 1947, 2015).
10. Guidelines for registration of adjuvants. (Approved by the Registrar, Act 36 of 1947, 2018).
11. Guidelines for registration of group 3 fertilizers. (Approved by the Registrar, Act 36 of 1947, 2016).
12. Guidelines on residue study requirements for registration of agricultural remedies and setting of maximum residue limits (mrl's) in South Africa. (Approved by the Registrar, Act 36 of 1947, 2016).
13. Managing crop diseases with seed treatments, Kay R. Ruden and Lawrence E. Osborne, 2009, South Dakota State University.
14. Pest control by seed treatment, W.H. Lange, E.C. Carlson and L.D. Leach,

- California Agriculture, May 1953.
15. Seed treatment, Oregon pesticide applicator training manual, 2001.
 16. Seed treatment a tool for sustainable agriculture, prepared by the seed treatment and environment committee of the International Seed Trade Federation (FIS), 1999.
 17. UK Efficacy Guideline 203, Pesticides for admixture with stored cereals to control insects and mites.
 18. UK Efficacy Guideline 202, Fumigants for the control of insect and mite pests of stored products.
 19. UK Efficacy Guideline 208, Seed treatments and physical /mechanical data requirements, September 2008.

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TABLE 4 - TABEL 4
PROVISIONS RELATING TO SEED AND SEED SAMPLES - BEPALINGS BETREFFENDE SAAD EN SAADMONSTERS
 (*No. of footnote/*No. van voetnota)

| Kind of plant Soort plant | | Maximum content (%) Maksimum inhoud (%) | | | Minimum percentage Minimum persentasie | | Minimum number per weight (kg) Minimum aantal per gewig (kg) | Prepacked seed Voorafverpakte saad | | Exempted from indication "Prepacked seed" Vrygestel van aanduiding "Voorafverpakte saad" | | Maximum mass (kg) of a seed lot Maksimum massa (kg) van 'n saadlot |
|--|---|--|--------------------------|---------------------------|--|---------------------------------|---|--|--|---|--|---|
| Botanical name Botaniese naam | Common name Gewone naam | Other matter Ander materiaal | Other seed Ander saad | Weed seed Onkruid-saad | Germination by number Ontkieming per nommer | Viability Lewens-kragtigheid | Germination by weighed replicate Ontkieming per geweegde replikaat | Max.mass (g) per container Maks.massa (g) per houer | Approx. no. of seed per container Benaderde aantal sade per houer | Max. mass (g) per container Maks. massa (g) per houer | Approx. no. of seed per container Benaderde aantal sade per houer | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| <i>Agroticum</i> | Agroticum | 4 | 0,2 | | 60 | | | 5 000 | 165 000 | 500 | 16 000 | 20 000 |
| <i>Allium cepa</i> L. | Onion/ Ui | 4 | 0,2 | | 60 | | | 500 | 170 500 | 50 | 17 050 | 10 000 |
| <i>Allium porrum</i> L. | Leek/ Prei | 4 | 0,2 | | 60 | | | 500 | 198 000 | 50 | 19 800 | 10 000 |
| <i>Anthephora pubescens</i> Nees | Bottle brush grass/ Borseltjiegras (i) Uncoated seed/ Nie-omhulde saad | 10 | 0,3 | | 20 | | | 5 000 | 905 000 | 500 | 90 500 | 10 000 |
| | (ii) Coated seed/ Omhulde saad | 5 | 0,3 | | 30 | | | 5 000 | 145 000 | 500 | 14 500 | 10 000 |
| <i>Arachis hypogaea</i> L. | Groundnut/ Grondboon | 2 | 0,1 | | 70 | | | 5 000 | 5 000 15 000 | 500 | 500 1 500 | 25 000 |
| <i>Asparagus officinalis</i> L. . | Asparagus/ Aspersie .. | 4 | 0,2 | | 60 | | | 500 | 25 300 | 50 | 2 500 | 20 000 |
| <i>Avena nuda</i> L. (*6) | Naked oats/ Naakhawer | 0,5 | 0,3 | TR | 80 | | | 5 000 | 200 000 | 500 | 20 000 | 25 000 |
| <i>Avena sativa</i> L. [incl. spp. previously known as/ insl. spp. voorheen bekend as <i>A. byzantina</i>] | Oats/ Hawer | 1 | 0,3 | 0,1 | 80 | | | 5 000 | 200 000 | 500 | 20 000 | 30 000 |
| <i>Beta vulgaris</i> L. | Fodder beet, Garden | 6 | 0,3 | | 60 | | | 1 000 | 58 000 | 100 | 5 800 | 20 000 |

| Kind of plant Soort plant | | Maximum content (%) Maksimum inhoud (%) | | | Minimum percentage Minimum persentasie | | Minimum number per weight (kg) Minimum aantal per gewig (kg) | Prepacked seed Voorafverpakte saad | | Exempted from indication "Prepacked seed" Vrygestel van aanduiding "Voorafverpakte saad" | | Maximum mass (kg) of a seed lot Maksimum massa (kg) van 'n saadlot |
|---|---|--|--------------------------|---------------------------|--|---------------------------------|---|--|--|---|--|---|
| Botanical name Botaniese naam | Common name Gewone naam | Other matter Ander materiaal | Other seed Ander saad | Weed seed Onkruid-saad | Germination by number Ontkieming per nommer | Viability Lewens-kragtigheid | Germination by weighed replicate Ontkieming per geweegde replikaat | Max.mass (g) per container Maks.massa (g) per houer | Approx. no. of seed per container Benaderde aantal sade per houer | Max. mass (g) per container Maks. massa (g) per houer | Approx. no. of seed per container Benaderde aantal sade per houer | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| | beet and Swiss chard/ Voerbeet, Tuinbeet en Snybeet | | | | | | | | | | | |
| <i>Brassica napus</i> L. | Forage rape, Swede/ Weikool, Sweedse raap | 4 | 0,2 | | 60 | | | 500 | 157 500 | 50 | 15 750 | 10 000 |
| <i>Brassica oleracea</i> L. | Fodder kale, Kohlrabi, Curly kale, Cauliflower, Broccoli, Cabbage, Savoy cabbage, Brussels sprouts/ Beeskool, Knolkool, Boerkool, Blomkool, Brokkoli, Kopkool, Savoikool, Brusselse spruitjies | 4 | 0,2 | | 60 | | | 500 | 157 500 | 50 | 14 750 | 10 000 |
| <i>Brassica rapa</i> L. [incl./insl. <i>B. campestris</i> L. and/en spp. previously known as/ spp. voorheen bekend as <i>B. chinensis</i> | Chinese cabbage/ Sjinese kool | 4 | 0,2 | | 60 | | | 500 | 316 500 | 50 | 31 650 | 10 000 |

| Kind of plant Soort plant | | Maximum content (%) Maksimum inhoud (%) | | | Minimum percentage Minimum persentasie | | Minimum number per weight (kg) Minimum aantal per gewig (kg) | Prepacked seed Voorafverpakte saad | | Exempted from indication "Prepacked seed" Vrygestel van aanduiding "Voorafverpakte saad" | | Maximum mass (kg) of a seed lot Maksimum massa (kg) van 'n saadlot |
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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| and/en <i>B. pekinensis</i>] | | | | | | | | | | | | |
| <i>Bromus catharticus</i> <i>Vahl</i> ■ | Rescue grass/ Reddingsgras | 8 | 0,5 | | 50 | | | 5 000 | 720 000 | 500 | 72 000 | 20 000 |
| <i>Capsicum</i> spp. | Peppers/ Rissies | 4 | 0,2 | | 60 | | | 500 | 83 500 | 50 | 8 350 | 10 000 |
| <i>Cenchrus ciliaris</i> L. | Blue buffalo grass/ Bloubuffelgras | 4 | 0,3 | | 20 | | | 5 000 | 2 675 000 | 500 | 267 000 | 10 000 |
| | (i) Uncoated seed/ Nie-omhulde saad | | | | | | | | | | | |
| | (ii) Coated seed/ Omhulde saad | 4 | 0,3 | | 20 | | | 5 000 | 290 000 | 500 | 29 000 | 10 000 |
| <i>Chloris gayana</i> Kunth ... | Rhodes grass/ Rhodesgras | 15 | 1,5 | 1,0 | 20 | 20 | 800 000 | 5 000 | 23 620 000 | 500 | 2 362 000 | 10 000 |
| | (i) Uncoated seed/ Nie-omhulde saad | | | | | | | | | | | |
| | (ii) Coated seed/ Omhulde saad | 5 | 1,0 | 0,5 | 20 | 20 | | 5 000 | 2 580 000 | 500 | 258 000 | 10 000 |
| <i>Citrullus lanatus</i> (Thunb.) Matsum. et Nakai | Watermelon/ Waatlemoen, | 4 | 0,1 | | 60 | | | 1 000 | 11 000 | 100 | 1 100 | 20 000 |

| Kind of plant Soort plant | | Maximum content (%) Maksimum inhoud (%) | | | Minimum percentage Minimum persentasie | | Minimum number per weight (kg) Minimum aantal per gewig (kg) | Prepacked seed Voorafverpakte saad | | Exempted from indication "Prepacked seed" Vrygestel van aanduiding "Voorafverpakte saad" | | Maximum mass (kg) of a seed lot Maksimum massa (kg) van 'n saadlot |
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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| | Makataan | | | | | | | | | | | |
| <i>Cucumis melo</i> L. | Sweet melon/ Spanspek | 4 | 0,1 | | 60 | | | 1 000 | 45 000 | 100 | 4 500 | 10 000 |
| <i>Cucumis sativus</i> L. | Cucumber/ Komkommer | 4 | 0,1 | | 60 | | | 1 000 | 38 000 | 100 | 3 800 | 10 000 |
| <i>Cucurbita maxima</i> Duchesne ex Lam. | Pumpkin, Squash/ Pampoen, Skorsie | 4 | 0,1 | | 60 | | | 1 000 | 5 000 | 100 | 500 | 20 000 |
| <i>Cucurbita moschata</i> (Duchesne ex Lam.) Duchesne ex Poir | Pumpkin, Squash/ Pampoen, Skorsie | 4 | 0,1 | | 60 | | | 1 000 | 14 000 | 100 | 1 400 | 10 000 |
| <i>Cucurbita pepo</i> L. | Squash/ Skorsie | 4 | 0,1 | | 60 | | | 1 000 | 14 000 | 100 | 1 400 | 20 000 |
| <i>Dactylis glomerata</i> L. | Cocksfoot/ Kropaargras | 15 | 2,5 | 0,5 | 60 | | | 5 000 | 8 280 000 | 500 | 828 000 | 10 000 |
| <i>Daucus carota</i> L. | Carrot/ Geelwortel | 4 | 0,2 | | 60 | | | 500 | 413 000 | 50 | 41 300 | 10 000 |
| <i>Desmodium intortum</i> (Mill.) Urb. (*2) | Green leaf desmodium/ Groenblaar desmodium | 6 | 1,0 | 0,5 | 50 | | | 5 000 | 3 240 000 | 500 | 324 000 | 10 000 |
| <i>Desmodium uncinatum</i> | Silver leaf desmodium/ | 6 | 1,0 | 0,5 | 50 | | | 5 000 | 1 010 000 | 500 | 101 000 | 10 000 |

| Kind of plant Soort plant | | Maximum content (%) Maksimum inhoud (%) | | | Minimum percentage Minimum persentasie | | Minimum number per weight (kg) Minimum aantal per gewig (kg) | Prepacked seed Voorafverpakte saad | | Exempted from indication "Prepacked seed" Vrygestel van aanduiding "Voorafverpakte saad" | | Maximum mass (kg) of a seed lot Maksimum massa (kg) van 'n saadlot |
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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| (Jacq.) DC. (*2) | Silwerblaar desmodium | | | | | | | | | | | |
| <i>Digitaria smutsii</i> Stent | Smuts digitaria/ Smutsvingergras (i) Uncoated seed/ Nie-omhulde saad | 8,0 | 1,0 | 0,5 | 15 | | | 5 000 | 10 660 000 | 500 | 1 066 000 | 10 000 |
| | (ii) Coated seed/ Omhulde saad | 10 | 1,0 | 0,5 | 20 | | | 5 000 | 5 235 000 | 500 | 523 500 | 10 000 |
| <i>Eragrostis curvula</i> (Schrad.) Nees (*5) | Weeping lovegrass/ Oulandsgras | 4 | 1,0 | 0,3 | 70 | | | 500 | 1 641 000 | 50 | 164 100 | 10 000 |
| <i>Eragrostis tef.</i> (Zuccagni) Trotter | Teff/ Tefgras | 4 | 1,0 | 0,3 | 70 | | | 500 | 2 304 000 | 50 | 230 400 | 10 000 |
| <i>Festuca arundinacea</i> Schreb. | Tall fescue/ Langswenkgras | 7 | 1,5 | 0,5 | 60 | | | 5 000 | 2 500 000 | 500 | 250 000 | 10 000 |
| <i>Glycine max</i> (L.) Merr. | Soya bean/ Sojaboon . | 4 | 0,1 | | 70 | | | 10 000 | 60 000 130 000 | 1 000 | 6 000 13 000 | 25 000 |
| <i>Gossypium hirsutum</i> L. . | Cotton/ Katoen | 4 | 0,2 | | 70 | | | 10 000 | 80 000 | 1 000 | 8 000 | 25 000 |
| <i>Helianthus annuus</i> L. | Sunflower/ Sonneblom | 4 | 0,1 | | 70 | | | 10 000 | 160 000 | 1 000 | 16 000 | 25 000 |
| <i>Hordeum vulgare</i> L. (*6) | Barley/ Gars | 2,5 | 0,3 | TR | 80 | | | 5 000 | 150 000 | 500 | 15 000 | 30 000 |
| <i>Lactuca sativa</i> L. | Lettuce/ Slaai | 6 | 0,2 | | 60 | | | 500 | 500 000 | 50 | 50 000 | 10 000 |
| <i>Lespedeza cuneata</i> | Lespedeza | 4 | 0,3 | | 60 | | | 5 000 | 4 100 000 | 500 | 410 000 | 10 000 |

| Kind of plant Soort plant | | Maximum content (%) Maksimum inhoud (%) | | | Minimum percentage Minimum persentasie | | Minimum number per weight (kg) Minimum aantal per gewig (kg) | Prepacked seed Voorafverpakte saad | | Exempted from indication "Prepacked seed" Vrygestel van aanduiding "Voorafverpakte saad" | | Maximum mass (kg) of a seed lot Maksimum massa (kg) van 'n saadlot |
|---|--|--|--------------------------|---------------------------|--|---------------------------------|---|--|--|---|--|---|
| Botanical name Botaniese naam | Common name Gewone naam | Other matter Ander materiaal | Other seed Ander saad | Weed seed Onkruid-saad | Germination by number Ontkieming per nommer | Viability Lewens-kragtigheid | Germination by weighed replicate Ontkieming per geweegde replikaat | Max.mass (g) per container Maks.massa (g) per houer | Approx. no. of seed per container Benaderde aantal sade per houer | Max. mass (g) per container Maks. massa (g) per houer | Approx. no. of seed per container Benaderde aantal sade per houer | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| (Dum.) G. Don (*1) | | | | | | | | | | | | |
| <i>Lespedeza striata</i> (Thunb.) Hook & Arn. (*1) | Lespedeza | 4 | 0,3 | | 60 | | | 5 000 | 3 750 000 | 500 | 375 000 | 10 000 |
| <i>Lolium x boucheanum</i> Kunth. | Hybrid ryegrass/ Basterraagras | 4 | 1,5 | 0,3 | 60 | | | 5 000 | 1 925 000 | 500 | 192 500 | 10 000 |
| <i>Lolium multiflorum</i> Lam. | Italian and Westerworld ryegrass/ Italiaanse en westerworldse raaigras | 4 | 1,5 | 0,3 | 60 | 60 | | 5 000 | 2 500 000 | 500 | 250 000 | 10 000 |
| <i>Lolium perenne</i> L. | Perennial ryegrass/ Meerjarige raaigras | 4 | 1,5 | 0,3 | 60 | 60 | | 5 000 | 2 500 000 | 500 | 250 000 | 10 000 |
| <i>Lolium rigidum</i> Gaudin ... | Annual ryegrass/ Eenjarige raaigras | 4 | 1,5 | 0,3 | 60 | 60 | | 5 000 | 1 035 000 | 500 | 103 500 | 10 000 |
| <i>Lotus corniculatus</i> L. (*3) | Birdsfoot trefoil/ Rolklawer | 4 | 0,6 | 0,3 | 60 | | | 5 000 | 4 070 000 | 500 | 407 000 | 10 000 |
| <i>Lupinus albus</i> L. (*3) | White lupin/ Witlupien | 2 | 0,3 | 0,1 | 70 | | | 10 000 | 70 000 | 1 000 | 7 000 | 25 000 |
| <i>Lupinus angustifolius</i> L. (*3) | Narrow leaf lupin/ Smalblaarlupien | 2 | 0,3 | 0,1 | 70 | | | 10 000 | 70 000 | 1 000 | 7 000 | 25 000 |
| <i>Lupinus luteus</i> L. (*3) | Yellow lupin/ Geelbloue lupien | 2 | 0,3 | 0,1 | 70 | | | 10 000 | 90 000 | 1 000 | 9 000 | 25 000 |

| Kind of plant Soort plant | | Maximum content (%) Maksimum inhoud (%) | | | Minimum percentage Minimum persentasie | | Minimum number per weight (kg) Minimum aantal per gewig (kg) | Prepacked seed Voorafverpakte saad | | Exempted from indication "Prepacked seed" Vrygestel van aanduiding "Voorafverpakte saad" | | Maximum mass (kg) of a seed lot Maksimum massa (kg) van 'n saadlot |
|--|----------------------------|--|--------------------------|---------------------------|--|----------------------------------|---|--|--|---|--|---|
| Botanical name Botaniese naam | Common name Gewone naam | Other matter Ander materiaal | Other seed Ander saad | Weed seed Onkruid-saad | Germination by number Ontkieming per nommer | Viability Lewens-krachtigheid | Germination by weighed replicate Ontkieming per geweegde replikaat | Max.mass (g) per container Maks.massa (g) per houer | Approx. no. of seed per container Benaderde aantal sade per houer | Max. mass (g) per container Maks. massa (g) per houer | Approx. no. of seed per container Benaderde aantal sade per houer | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| | Geellupien | | | | | | | | | | | |
| <i>Lycopersicon esculentum</i> Mill., nom cons. | Tomato/ Tamatie | 2 | 0,2 | | 60 | | | 500 | 202 500 | 50 | 20 250 | 10 000 |
| <i>Medicago littoralis</i> Rhode ex Loisel (*2) | Strand medic | 4 | 0,2 | | 60 | | | 5 000 | 1 805 000 | 500 | 180 500 | 10 000 |
| <i>Medicago polymorpha</i> L. (*2) | Burr medic | 3 | 0,8 | 0,3 | 60 | | | 5 000 | 1 380 000 | 500 | 138 000 | 10 000 |
| <i>Medicago rugosa</i> Desr. (*2) | Gama medic | 3 | 0,5 | 0,3 | 60 | | | 5 000 | 705 000 | 500 | 70 500 | 10 000 |
| <i>Medicago sativa</i> L. (incl. spp. previously known as/insl. spp. voorheen bekend as <i>Medicago x varia</i>) (*2) . | Lucerne/ Lusern | 3 | 0,5 | 0,3 | 70 | | | 2 000 | 730 000 | 200 | 73 000 | 10 000 |
| <i>Medicago scutellata</i> (L.) Mill. (*2) | Snail medic | 3 | 0,5 | 0,3 | 60 | | | 5 000 | 255 000 | 500 | 25 500 | 10 000 |
| <i>Medicago truncatula</i> Gaertn. (*2) | Barrel medic | 3 | 1,0 | 0,3 | 60 | | | 5 000 | 1 190 000 | 500 | 119 000 | 20 000 |
| <i>Nicotiana tabacum</i> L. | Tobacco/ Tabak | 4 | 0,2 | | 80 | | | 5 000 | 78 125 000 | 500 | 7 812 500 | 10 000 |

| Kind of plant Soort plant | | Maximum content (%) Maksimum inhoud (%) | | | Minimum percentage Minimum persentasie | | Minimum number per weight (kg) Minimum aantal per gewig (kg) | Prepacked seed Voorafverpakte saad | | Exempted from indication "Prepacked seed" Vrygestel van aanduiding "Voorafverpakte saad" | | Maximum mass (kg) of a seed lot Maksimum massa (kg) van 'n saadlot |
|---|--|--|--------------------------|---------------------------|--|---------------------------------|---|--|--|---|--|---|
| Botanical name Botaniese naam | Common name Gewone naam | Other matter Ander materiaal | Other seed Ander saad | Weed seed Onkruid-saad | Germination by number Ontkieming per nommer | Viability Lewens-kragtigheid | Germination by weighed replicate Ontkieming per geweegde replikaat | Max.mass (g) per container Maks.massa (g) per houer | Approx. no. of seed per container Benaderde aantal sade per houer | Max. mass (g) per container Maks. massa (g) per houer | Approx. no. of seed per container Benaderde aantal sade per houer | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| <i>Ornithopus compressus</i> L. (*1) | Yellow serradella/ Geel serradella | 4 | 1,5 | 0,5 | 70 | | | 5 000 | 1 035 000 | 500 | 103 500 | 10 000 |
| <i>Ornithopus sativus</i> Brot. (*3) | Serradella | 2 | 0,5 | 0,3 | 60 | | | 5 000 | 1 135 000 | 500 | 113 500 | 10 000 |
| <i>Oryza sativa</i> L. | Rice/ Rys | 4 | 0,1 | | 70 | | | 10 000 | 660 000 | 1 000 | 66 000 | 30 000 |
| <i>Panicum maximum</i> Jacq. | White buffalo grass/ Witbuffelgras | 2,5 | 0,7 | 0,5 | 10 | 20 | | 5 000 | 11 035 000 | 500 | 1 103 500 | 10 000 |
| | (i) Uncoated seed/ Nie-omhulde saad | | | | | | | | | | | |
| | (ii) Coated seed/ Omhulde saad | 10 | 1,0 | 0,5 | 20 | 40 | | 5 000 | 3 845 000 | 500 | 384 500 | 10 000 |
| <i>Paspalum dilatatum</i> Poir. | Dallis grass/ Paspalum | 40 | 0,3 | | 40 | | | 5 000 | 2 960 000 | 50 | 29 600 | 10 000 |
| <i>Paspalum notatum</i> Flüggé | Bahia | 40 | 0,3 | | 40 | | | 5 000 | 1 830 000 | 50 | 18 300 | 10 000 |
| <i>Pastinaca sativa</i> L. | Parsnip/ Witwortel | 7 | 0,2 | | 50 | | | 500 | 214 500 | 50 | 21 450 | 10 000 |
| <i>Pennisetum clandestinum</i> Hochst. ex Chiov. | Kikuyu/ Kikoejoe | 5 | 0,3 | | 60 | | | 500 | 185 500 | 50 | 18 550 | 10 000 |
| <i>Pennisetum glaucum</i> (L.) R. Br. | Pearl millet/ Babala | 7 | 0,2 | | 60 | | | 5 000 | 970 000 | 500 | 97 000 | 10 000 |

| Kind of plant Soort plant | | Maximum content (%) Maksimum inhoud (%) | | | Minimum percentage Minimum persentasie | | Minimum number per weight (kg) Minimum aantal per gewig (kg) | Prepacked seed Voorafverpakte saad | | Exempted from indication "Prepacked seed" Vrygestel van aanduiding "Voorafverpakte saad" | | Maximum mass (kg) of a seed lot Maksimum massa (kg) van 'n saadlot |
|---|---|--|--------------------------|---------------------------|--|---------------------------------|---|--|--|---|--|---|
| Botanical name Botaniese naam | Common name Gewone naam | Other matter Ander materiaal | Other seed Ander saad | Weed seed Onkruid-saad | Germination by number Ontkieming per nommer | Viability Lewens-kragtigheid | Germination by weighed replicate Ontkieming per geweegde replikaat | Max.mass (g) per container Maks.massa (g) per houer | Approx. no. of seed per container Benaderde aantal sade per houer | Max. mass (g) per container Maks. massa (g) per houer | Approx. no. of seed per container Benaderde aantal sade per houer | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| <i>Petroselinum crispum</i> (Mill.) Nyman ex. A. W. Hill | Parsley/ Pietersielie ... | 6 | 0,2 | | 50 | | | 500 | 324 000 | 50 | 32 400 | 10 000 |
| <i>Phalaris aquatica</i> L. | Phalaris | 6 | 0,3 | | 60 | | | 5 000 | 2 980 000 | 500 | 298 000 | 10 000 |
| <i>Phaseolus coccineus</i> L. | Kidney bean/ Nierboon | 4 | 0,1 | | 60 | | | 5 000 | 5 000 | 500 | 500 | 20 000 |
| <i>Phaseolus vulgaris</i> L. ... | Dry bean/ Droëboon ... | 4 | 0,1 | | 60 | | | 5 000 | 20 000 | 500 | 2 000 | 25 000 |
| <i>Phaseolus vulgaris</i> L. ... | Garden bean – Runner/ Tuinboon – Rank | 4 | 0,1 | | 60 | | | 5 000 | 20 000 | 500 | 2 000 | 25 000 |
| <i>Phaseolus vulgaris</i> L. ... | Garden bean - Dwarf/ Tuinboon – Stam | 4 | 0,1 | | 60 | | | 5 000 | 22 000 | 500 | 2 200 | 25 000 |
| <i>Pisum sativum</i> L. s. l. | Dry pea, Garden pea/Droë ert, Tuinert | 4 | 0,1 | | 60 | | | 5 000 | 25 000 | 500 | 2 500 | 25 000 |
| <i>Raphanus sativus</i> L. | Fodder radish/ Voerradys | 4 | 0,2 | | 60 | | | 5 000 | 375 000 | 500 | 37 500 | 10 000 |
| <i>Raphanus sativus</i> L. | Garden radish/ Tuinradys | 4 | 0,2 | | 60 | | | 500 | 60 000 | 50 | 6 000 | 10 000 |
| <i>Ricinus communis</i> L. | Castor oil/ Kasterolie .. | 4 | 0,1 | | 70 | | | 10 000 | 50 000 | 1 000 | 5 000 | 20 000 |
| <i>Secale cereale</i> L. | Rye/ Rog | 2 | 0,5 | 0,2 | 75 | | | 5 000 | 200 000 | 500 | 20 000 | 30 000 |
| <i>Setaria sphacelata</i> | Common setaria/ | 40 | 0,3 | | 30 | | | 5 000 | 7 825 000 | 500 | 782 500 | 10 000 |

| Kind of plant Soort plant | | Maximum content (%) Maksimum inhoud (%) | | | Minimum percentage Minimum persentasie | | Minimum number per weight (kg) Minimum aantal per gewig (kg) | Prepacked seed Voorafverpakte saad | | Exempted from indication "Prepacked seed" Vrygestel van aanduiding "Voorafverpakte saad" | | Maximum mass (kg) of a seed lot Maksimum massa (kg) van 'n saadlot |
|---|-------------------------------------|--|--------------------------|---------------------------|--|---------------------------------|---|--|--|---|--|---|
| Botanical name Botaniese naam | Common name Gewone naam | Other matter Ander materiaal | Other seed Ander saad | Weed seed Onkruid-saad | Germination by number Ontkieming per nommer | Viability Lewens-kragtigheid | Germination by weighed replicate Ontkieming per geweegde replikaat | Max.mass (g) per container Maks.massa (g) per houer | Approx. no. of seed per container Benaderde aantal sade per houer | Max. mass (g) per container Maks. massa (g) per houer | Approx. no. of seed per container Benaderde aantal sade per houer | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| (Schumach.) Stapf. & C.E. Hubb | Gewone setaria | | | | | | | | | | | |
| <i>Sinapis alba</i> L. | White mustard/ Witmosterd | 4 | 0,2 | | 60 | | | 500 | 284 500 | 50 | 28 450 | 10 000 |
| <i>Solanum melongena</i> L. | Eggplant, Aubergine/ Eiervrug | 4 | 0,2 | | 60 | | | 500 | 114 000 | 50 | 11 400 | 10 000 |
| <i>Sorghum bicolor</i> (L.) Moench | Grain sorghum/ Graansorghum | 4 | 0,1 | | 70 | | | 5 000 | 150 000 | 500 | 15 000 | 10 000 |
| <i>Sorghum</i> spp. [S. x <i>almum</i> Parodi, S. <i>sudanense</i> (Piper) Stapf. and/ en hybrids/ hibriede] (*4) | Forage sorghum/ Voersorghum | 7 | 0,2 | | 60 | 70 | | 5 000 | 650 000 | 500 | 65 000 | 10 000 |
| <i>Stylosanthes hamata</i> (L.) Taub. (*1) | Caribbean stylo/ Karibiese stylo | 10 | 1,0 | 0,5 | 50 | | | 5 000 | 2 450 000 | 500 | 245 000 | 10 000 |
| <i>Trifolium fragiferum</i> L. (*3) | Strawberry clover/ Aarbeiklawer | 6 | 0,3 | | 60 | | | 1 000 | 635 000 | 100 | 63 500 | 10 000 |
| <i>Trifolium hirtum</i> All. (*3) | Rose clover/ Roosklawer | 4 | 0,3 | | 60 | | | 1 000 | 358 000 | 100 | 35 800 | 10 000 |
| <i>Trifolium incarnatum</i> L. (*3) | Crimson clover/ Inkarnaatklawer | 4 | 0,3 | | 60 | | | 1 000 | 330 000 | 100 | 33 000 | 10 000 |

| Kind of plant Soort plant | | Maximum content (%) Maksimum inhoud (%) | | | Minimum percentage Minimum persentasie | | Minimum number per weight (kg) Minimum aantal per gewig (kg) | Prepacked seed Voorafverpakte saad | | Exempted from indication "Prepacked seed" Vrygestel van aanduiding "Voorafverpakte saad" | | Maximum mass (kg) of a seed lot Maksimum massa (kg) van 'n saadlot |
|--|---|--|--------------------------|-------------------------------|--|-------------------------------------|---|--|--|---|--|---|
| Botanical name Botaniese naam | Common name Gewone naam | Other matter Ander materiaal | Other seed Ander saad | Weed seed Onkruid- saad | Germination by number Ontkieming per nommer | Viability Lewens- kragtigheid | Germination by weighed replicate Ontkieming per geweegde replikaat | Max.mass (g) per container Maks.massa (g) per houer | Approx. no. of seed per container Benaderde aantal sade per houer | Max. mass (g) per container Maks. massa (g) per houer | Approx. no. of seed per container Benaderde aantal sade per houer | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| <i>Trifolium pratense</i> L. (*3) | Red clover/ Rooiklawer | 6 | 0,3 | | 60 | | | 1 000 | 600 000 | 100 | 60 000 | 10 000 |
| <i>Trifolium repens</i> L. (*2) | White clover/ Witklawer | 6 | 0,3 | | 60 | | | 1 000 | 1 500 000 | 100 | 150 000 | 10 000 |
| <i>Trifolium resupinatum</i> L. (*3) | Persian clover/ Persiese klawer | 4 | 0,3 | | 60 | | | 1 000 | 1 416 000 | 100 | 141 600 | 10 000 |
| <i>Trifolium subterraneum</i> L. (*3) | Subterranean clover/ Ondergrondse klawer | 6 | 0,3 | | 60 | | | 1 000 | 119 000 | 100 | 11 900 | 10 000 |
| <i>Trifolium vesiculosum</i> Savi (*1) | Arrow leaf clover/ Assegaaiklawer | 4 | 0,3 | | 60 | | | 1 000 | 699 000 | 100 | 59 900 | 10 000 |
| x <i>Triticosecale</i> Wittm. (<i>Triticum</i> x <i>Secale</i>) | Triticale/ Korog | 3 | 0,5 | | 80 | | | 5 000 | 130 000 | 500 | 13 000 | 30 000 |
| <i>Triticum aestivum</i> L., nom. cons. (*6) | Wheat/ Koring | 1,5 | 0,3 | TR | 80 | | | 5 000 | 250 000 | 500 | 25 000 | 30 000 |
| <i>Triticum durum</i> Desf. (*6) | Durum wheat/ Durumkoring | 1 | 0,3 | TR | 80 | | | 5 000 | 250 000 | 500 | 25 000 | 30 000 |
| <i>Vicia faba</i> L. (*3) | Broad bean/ Boerboon | 4 | 0,5 | 0,2 | 70 | | | 5 000 | 5 000 | 500 | 500 | 25 000 |
| <i>Vicia sativa</i> L. [Incl./insl. <i>V. angustifolia</i> L.] (*3) | Common vetch/ Gewone wiek | 4 | 0,2 | | 60 | | | 5 000 | 95 000 300 000 | 500 | 9 500 30 000 | 25 000 |
| <i>Vicia villosa</i> Roth. [incl./ | Hairy vetch/ Harige | 4 | 0,2 | | 60 | | | 5 000 | 125 000 | 500 | 12 500 | 20 000 |

| Kind of plant Soort plant | | Maximum content (%) Maksimum inhoud (%) | | | Minimum percentage Minimum persentasie | | Minimum number per weight (kg) Minimum aantal per gewig (kg) | Prepacked seed Voorafverpakte saad | | Exempted from indication "Prepacked seed" Vrygestel van aanduiding "Voorafverpakte saad" | | Maximum mass (kg) of a seed lot Maksimum massa (kg) van 'n saadlot |
|--|---|--|--------------------------|-------------------------------|--|-------------------------------------|---|--|--|---|--|---|
| Botanical name Botaniese naam | Common name Gewone naam | Other matter Ander materiaal | Other seed Ander saad | Weed seed Onkruid- saad | Germination by number Ontkieming per nommer | Viability Lewens- kragtigheid | Germination by weighed replicate Ontkieming per geweegde replikaat | Max.mass (g) per container Maks.massa (g) per houer | Approx. no. of seed per container Benaderde aantal sade per houer | Max. mass (g) per container Maks. massa (g) per houer | Approx. no. of seed per container Benaderde aantal sade per houer | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| insl. <i>V. dasycarpa</i> Ten.] (*3) | wiek | | | | | | | | 180 000 | | 18 000 | |
| <i>Vigna unguiculata</i> (L.) Walp [incl./ insl. <i>V. sinensis</i> (L.) Savi ex Hassk.; <i>Dolichos biflorus</i> (L.)] (*3) | Cowpea/ Akkerboon ... | 4 | 0,1 | | 60 | | | 5 000 | 40 000 | 500 | 4 000 | 20 000 |
| <i>Zea mays</i> L. | White and yellow grain maize/ Wit en geel graanmielie | 4 | 0,1 | | 70 | | | 10 000 | 36 000 | 1 000 | 3 600 | 40 000 |
| <i>Zea mays</i> L. | Sweet corn/ Soetmielies | 4 | 0,1 | | 70 | | | 10 000 | 60 000 | 1 000 | 6 000 | 40 000 |

[Table 4 amended, corrected and substituted by R. 1287 of 14 June 1985, R. 1524 of 12 July 1985, R. 1487 of 11 July 1986, R. 2496 of 9 December 1988,

R. 1638 of 12 July 1991, R. 1971 of 16 August 1991, R. 2119 of 24 July 1992, R. 2618 of 18 September 1992, R. 1590 of 27 August 1993, R. 2057 of 29 October 1993, R. 513 of 18 March 1994, R. 174 of 10 February 1995, R. 319 of 3 March 1995, R. 97 of 24 January 1997, R. 1207 of 1 December 2000; R. 849 of 2 September 2005 (as corrected by R. 928 of 30 September 2005, R. 770 of 4 August 2006 and R. 56 of 2 February 2007]

[Tabel 4 gewysig, verbeter en vervang deur R. 1287 van 14 Junie 1985, R. 1524 van 12 Julie 1985, R. 1487 van 11 Julie 1986, R. 2496 van 9

Desember 1988,

R. 1638 van 12 Julie 1991, R. 1971 van 16 Augustus 1991, R. 2119 van 24 Julie 1992, R. 2618 van 18 September 1992, R. 1590 van 27 Augustus 1993, R. 2057 van 29 Oktober 1993, R. 513 van 18 Maart 1994, R. 174 van 10 Februarie 1995, R. 319 van 3 Maart 1995, R. 97 van 24 Januarie 1997, R. 1207 van 1 Desember 2000; R. 849 van 2 September 2005 (soos verbeter deur R. 928 van 30 September 2005), R. 770 van 4 Augustus 2006 en R. 56 van 2 Februarie 2007]

FOOTNOTE - VOETNOTA

1. In the case of *Lespedeza cuneata* (Dum) G. Don., *Lespedeza striata* (Thunb. ex. J. Murr.) Hook et Arn., *Ornithopus compressus* L., *Stylosanthes hamata* (L.) Taub. and *Trifolium vesiculosum* Savi., up to 60 per cent hard seeds may be counted as germinated or viable seeds.
 2. In the case of *Desmodium intortum* (Mill) Urb., *Desmodium uncinatum* (Jacq) DC., *Medicago littoralis* Rohde, *Medicago polymorpha* L., *Medicago rugosa* Desr., *Medicago sativa* L., *Medicago scutellata* (L.) Miller, *Medicago truncatula* Gaertn. and *Trifolium repens* L., up to 40 per cent hard seeds may be counted as germinated or viable seeds.
 3. In the case of *Lotus corniculatus* L., *Lupinus albus* L., *Lupinus angustifolius* L., *Lupinus luteus* L., *Ornithopus sativus* Brot., *Trifolium fragiferum* L., *Trifolium hirtum* All., *Trifolium incarnatum* L., *Trifolium pratense* L., *Trifolium resupinatum* L., *Trifolium subterraneum* L., *Vicia faba* L., *Vicia sativa* L., *Vicia villosa* Roth. and *Vigna unguiculata* (L.) Walp., up to 20 per cent hard seeds may be counted as germinated or viable seeds.
 4. In the case of *Sorghum* spp. the test for viability is only applicable where seed is still enveloped by the flower parts.
 5. In the case of *Eragrostis curvula* (Schrad.) Nees, not more than 0,2 nematode galls caused by *Anguina* spp., are allowed.
 6. In the case of *Avena nuda* L., *Hordeum vulgare* L., *Triticum aestivum* L. and *Triticum durum* Desf., TR means trace components amounting to less than 0,05 per cent.
1. In die geval van *Lespedeza cuneata* (Dum) G. Don., *Lespedeza striata* (Thunb. ex. J. Murr.) Hook et Arn., *Ornithopus compressus* L., *Stylosanthes hamata* (L.) Taub. en *Trifolium vesiculosum* Savi., mag tot 60 persent harde sade as ontkiemde of lewenskragtige sade bygetel word.
 2. In die geval van *Desmodium intortum* (Mill) Urb., *Desmodium uncinatum* (Jacq) DC., *Medicago littoralis* Rohde, *Medicago polymorpha* L., *Medicago rugosa* Desr., *Medicago sativa* L., *Medicago scutellata* (L.) Miller, *Medicago truncatula* Gaertn. en *Trifolium repens* L., mag tot 40 persent harde sade as ontkiemde of lewenskragtige sade bygetel word.
 3. In die geval van *Lotus corniculatus* L., *Lupinus albus* L., *Lupinus angustifolius* L., *Lupinus luteus* L., *Ornithopus sativus* Brot., *Trifolium fragiferum* L., *Trifolium hirtum* All., *Trifolium incarnatum* L., *Trifolium pratense* L., *Trifolium resupinatum* L., *Trifolium subterraneum* L., *Vicia faba* L., *Vicia sativa* L., *Vicia villosa* Roth. en *Vigna unguiculata* (L.) Walp., mag tot 20 persent harde sade as ontkiemde of lewenskragtige sade bygetel word.
 4. In die geval van *Sorghum* spp. is die toets vir lewenskragtigheid slegs van toepassing waar saad nog deur die blomdele omhul is.
 5. In die geval van *Eragrostis curvula* (Schrad.) Nees, word nie meer as 0,2 aalwurmgalle veroorsaak deur *Anguina* spp., toegelaat nie.
 6. In die geval van *Avena nuda* L., *Hordeum vulgare* L., *Triticum aestivum* L. en *Triticum durum* Desf., beteken TR dat skaars waarneembare komponente minder as 0,05 persent is.

[Footnote amended and substituted by R. 1287 of 14 June 1985, R. 1524 of 12 July 1985, R. 1638 of 12 July 1991 and R.

174 of 10 February 1995]

[Voetnota gewysig en vervang deur R. 1287 van 14 Junie 1985, R. 1524 van 12 Julie 1985, R. 1638 van 12 Julie 1991 en R. 174 van 10 Februarie 1995]