

**GUIDELINES
FOR SEED TREATMENT
REGISTRATION TRIALS
AND
FOR THE LABELLING
OF TREATED SEED**

Approved by
The Registrar, Act 36 of 1947
The Director, Act 53 of 1976
SANSOR
AVCASA

1. INTRODUCTION

- 1.1 The purpose of these guidelines is to obtain greater uniformity in registration trials for seed treatment. This exposition serves only as a guide to such trials.
- 1.2 These guidelines do not replace the requirements set out in Act 36/1947 and the regulations promulgated thereunder but are only complementary to the above.
- 1.3 If required by the appointed Research Institute and/or region, a sample of the candidate seed treatment remedy (ST) must be submitted to them for evaluation in their own crop tolerance and efficacy studies. The sample must be submitted well in advance of the commencement of the planting season. These trials will serve merely to back up and not to replace the data produced by the applicant.

2. GENERAL GUIDELINES

- 2.1 Experimentation with a view to obtaining registration of an agricultural remedy must be discussed in advance with the Technical Advisor, (Act 36/1947 of the Department of Agriculture), and the relevant Research Institute for the crop(s) concerned.
- 2.2 The bio-efficacy testing of the ST remains the sole concern of the **AVCASA** member.
- 2.3 The crop tolerance testing of the ST must be co-ordinated with **AVCASA** and **SANSOR** nominated representatives, such that a widely representative selection (including known sensitive cultivars) of the crop's commercial cultivars are screened. It is accepted that crop tolerance testing on every cultivar is not required to obtain registration. However, **SANSOR** and the **AVCASA** member should achieve a mutually acceptable trial programme whereby a reasonable cross section of cultivars are tested.

2.4 The Department of Agriculture, **SANSOR** or its appointed representative should be kept informed of the progress of registration trials. Due to the complexity of crop tolerance reactions, notification of any observed cultivar sensitivity (phytotoxicity) reactions should be immediate, so that mutual verification can be undertaken. Trial sites must be available for inspection by officers of the Department.

3. GENERAL TRIAL REQUIREMENTS

3.1 Trials in the major production areas will be required. The actual number of trials, however, shall be determined during the initial discussions with the Department.

3.2 Trials should be conducted over two seasons in different bio-climatic regions and on a range of different soil types. The soil from each site must be analysed (pH, clay contents, soil type classification).

3.3 Climatic and soil moisture conditions at and immediately post planting must be recorded.

3.4 Details must also be furnished concerning application methodology eg. type of seed treatment equipment used.

4. BIO-EFFICACY AND RESIDUE TRIAL REQUIREMENTS

4.1 Trials must be planned using recognised biometric procedures ie. replication, randomisation, design, plot size and analysis.

4.2 A range of application and dilution rates should be evaluated in order to determine the most suitable dosage rate.

4.3 Planting depth, soil moisture, organic material content etc. are of importance and trials must be carried out to illustrate these characteristics of the ST. Product labelling must reflect results obtained.

- 4.4 Activity assessments of the ST must be collected using criteria as approved by the appointed Research Institute for the pest organism concerned.
- 4.5 Residue trials must be undertaken according to the requirements set out by the Registrar (Act 36/1947).
- 4.6 If the ST is to be applied after or in combination with existing ST remedies, the bio-efficacy of the final combination must be tested.

5. CROP TOLERANCE TRIAL REQUIREMENTS FOR NEW SEED TREATMENT REMEDIES

- 5.1 Trials must be planned using recognised biometric procedures, eg. replication, randomisation, design, plot size and analysis.
- 5.2 The trial programme to evaluate crop tolerance should be aimed at satisfying the Registrar (Act 36/1947) and members of **SANSOR** that the ST has been thoroughly tested under a representative variety of local conditions and commercial cultivars.
- 5.3 Recognising that the viability of the seed used in crop tolerance studies is a major factor in the interpretation of results, it is recommended that seed with a viability status which approximates the minimum germination requirement under the Plant Improvement Act (Act 53/1976) should be used.
- 5.4 Initial contact between the **AVCASA** member and **SANSOR** should occur prior to the initiation of the final ST trial programme.
- 5.5 The crop tolerance trial programme should be regularly reviewed between the **AVCASA** member and **SANSOR**.
- 5.6 Utilising existing overseas' crop tolerance data, **SANSOR** should then advise the **AVCASA** member which **SANSOR** member(s) to approach in order to assist in crop tolerance testing.
- 5.7 Crop tolerance testing should evaluate harsh (adverse) conditions, eg. high application rates and cool conditions etc.

5.8. The time duration of the crop tolerance trial programme will depend on factors such as whether the ST is a new active ingredient, (a minimum of two years testing), or whether a registration label extension is merely required, (a one year trial programme).

5.9 During testing, if any crop sensitivity is indicated, more specific cultivar tolerance field tests are to be undertaken and reviewed with the **SANSOR** member or its appointed representative on an on-going basis.

5.10 To evaluate specific ST x time lapse after treatment to planting interaction effects, additional trials with sensitive cultivars will be undertaken by the **AVCASA** member in conjunction with **SANSOR** members. The results of such tests would be used for ST label recommendations.

5.11 Data is not required on every cultivar or new cultivars in order to obtain a registration. The registration is targeted for the crop in general.

6. **CROP TOLERANCE TRIAL REQUIREMENTS FOR NEW CULTIVARS**

During new cultivar evaluation (both the National trials and by **SANSOR** member trials), a broad spectrum of conditions (sites, soils, farmer practices, etc.) are experienced. Thus if specific cultivar sensitivity problems exist and provided that the ST's are being widely used by commercial farmers, sensitivity is likely to be identified in the field prior to commercialisation.

SANSOR members must take cognisance of crop tolerance problems and ensure thorough evaluation under harsh conditions of the specific interaction before the new cultivar is released. Recognising the dual responsibilities of **AVCASA** and **SANSOR** to the users of ST, this evaluation of such sensitivities by the **SANSOR** member should be planned in conjunction with the concerned **AVCASA** member.

7. SEED LABELLING

Labelling of treated seed should comprise minimum standards as laid out below. This labelling should include a general warning as well as specific details of the treatment. The warning should carry the statements as below, namely

WARNING

CHEMICALLY TREATED SEED - DO NOT USE FOR FOOD, FEED OR PROCESSING

TRADE NAME

REGISTRATION NO.

1. eg. PROGROW 500 L 10 000 ACT 36/1947
2.
3.

Refer to product label for full details

ADDITIONAL CHEMICAL TREATMENT OF SEED IS DONE AT OWN RISK.

WAARSKUWING

CHEMIES BEHANDELDE SAAD - MOET NIE VIR VOEDSEL, VOER OF PROSESSERING GEBRUIK NIE.

HANDELSNAAM

REGISTRASIENOMMER

1. bv. PROGROW 500 L 10 000 WET 36/1947
 2.
 3.
- Verwys na produketiket vir nadere besonderhede

ADDITIONELE CHEMIESE BEHANDELING VAN SAAD WORD OP EIE RISIKO GEDOEN.

7.1 SEED LABELLING FOR PRE-PACKED VEGETABLE AND FLOWER SEED

In the case of pre-packed vegetable and flower seed, as defined by the Plant Improvement Act, Act 53/1976, the packer may use the following alternative warning statement :

WARNING

**CHEMICALLY TREATED SEED - DO NOT USE FOR FOOD,
FEED OR PROCESSING**

8. SEED TREATMENT PRODUCT LABELLING

In addition to the labelling requirements as laid down by Act 36 of 1947, ST product labels should include :

8.1 A warning relating to crop tolerance

For a new product where only a limited number of cultivars have been tested the statement should be targeting at listing the cultivars where use can be recommended by **SANSOR / AVCASA**. As more cultivars are evaluated with time, listing by exception is recommended.

8.2 A statement that :

All treated seed should be labelled and stored in accordance with **SANSOR / AVCASA** guidelines.

8.3 Clear guidelines relating to application methodology for both centrally and on-farm treated seed.

8.4 A statement that :

**This seed treatment has been tested according to SANSOR and
AVCASA guidelines.**