AGRI-TRIAL SECTION
Your ref.: Verbal 2005-08-01
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The Managing Director
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## PESTICIDE TEST

### 0 AMENDMENTS

0.1 Second row of results in Table 1 sample referred to is F10 Insecticide Ointment.

0.2 Approximate quantity of sample applied to glass plates added.

### 1 SAMPLES TESTED

1.1 One container marked F10 Insecticide Spray - Batch No. 262.

1.2 One container marked F10 Insecticide Ointment - Batch No. 263.

Note - The samples were submitted on 1 August 2005.

### 2 TEST REQUESTED

To determine the biological efficacy of the samples against blow flies.

### 3 TEST METHOD

3.1 As test a *Lucilia sp.* blowfly was used.

3.2 On 11 August 2005 eight glass plates (125 mm x 125 mm) were treated with the samples. Four were covered with a layer of the spray and the other four with a very fine film of the ointment.

3.3 Another four plates were left untreated and served as controls.

3.4 Approximately 20 to 40 blow flies were placed in each of 12 wire gauze cages (125 mm x 125 mm x 125 mm). The one side of the cages was fitted with a sliding glass panel.

3.5 30 minutes after treatment the existing plates in the cages were replaced with the eight treated and four untreated panels.

3.6 The number of flies knocked down in the cages with the plates treated with the spray were counted after 15 and 30 minutes and those treated with the ointment every 15 minutes up to 60 minutes and a final count after 90 minutes.

3.7 The original glass plates were then placed back in the cages and the flies supplied with food and water.

3.8 Mortality counts were taken after 24 h.

3.9 To determine if the samples were effective for 5 days a new set of glass plates were treated with the samples on 21 September 2005.

Note - the sponsor requested a thicker layer of the ointment to be placed on the plates. The approximate mass applied to each plate was determined.

3.10 On 26 September 2005 approximately 30 blowflies were exposed under petri dish halves on the plates whereafter they were transferred to clean observation cages with food.

3.11 Mortality counts were also taken after 24 h as percentages.

## 4 RESULTS

The results obtained are given in Tables 1 and 2.

TABLE 1 - RESULTS: INITIAL EXPOSURE 30 MINUTES AFTER TREATMENT

| Sample | Knockdown counts % | | | | | | Mortality counts % | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Time exposed min | Replicates | | | | Mean | Replicates | | | | Mean |
| | | 1 | 2 | 3 | 4 | | 1 | 2 | 3 | 4 | |
| F10 Insecticide Spray | 15 | 63 | 83 | 82 | 78 | 77 | 100 | 100 | 100 | 100 | 100 |
| | 30 | 100 | 100 | 100 | 100 | 100 | | | | | |
| F10 Insecticide Ointment | 15 | 9 | 11 | 3 | 3 | 7 | 91 | 74 | 89 | 85 | 85 |
| | 30 | 20 | 16 | 8 | 5 | 12 | | | | | |
| | 45 | 29 | 37 | 37 | 21 | 31 | | | | | |
| | 60 | 49 | 74 | 47 | 41 | 53 | | | | | |
| | 90 | 91 | 74 | 89 | 85 | 85 | | | | | |
| Untreated control | - | - | - | - | - | - | 0 | 0 | 6 | 4 | 3 |
| The approximate mass of spray and ointment applied to each glass plate was 187 mg and 5 mg respectively. | | | | | | | | | | | |

**TABLE 2 - SECOND TEST: RESIDUAL EFFECT AFTER FIVE DAYS**

| Sample | Mortality counts % | | | | |
|---|---|---|---|---|---|
| | Replicates | | | | Mean |
| | 1 | 2 | 3 | 4 | |
| F10 Insecticide Spray | 100 | 100 | 100 | 100 | 100 |
| F10 Insecticide Ointment | 100 | 100 | 100 | 100 | 100 |
| Untreated control | 0 | 0 | 0 | 0 | 0 |
| The approximate mass of spray and ointment applied to each glass plate was 187 mg and 64 mg respectively. | | | | | |

## 5 REMARKS

Attention is drawn to the regulations governing the registration and sale of agricultural and stock remedies, promulgated under the Fertilizers, Farm Feeds, Agricultural Remedies and Stock remedies Act, 1947 (Act 36 of 1947).

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