FIELD PEST AND DISEASE DIAGNOSTICS IN SEED CROPS COURSE HELD FROM 4TH TO 10TH FEBRUARY 2018 AT UoN KABETE CAMPUS

SEMIs UoN
Seed Enterprises Management Institute
University of Nairobi

Reporting of inspection results, consequences and options for rejected crops presented by Daniel Kiptoo
REPORTING OF INSPECTION RESULTS

- Field inspection means an examination of crop seed field including checking of isolation distance, trueness to type, off-types and diseased plants.

- Field inspection results should be reported immediately after inspection.

- Report is made on a standard format (SR6).
Requirements during field inspection

To carry out effective field inspection, the following are required:

1. Application for field inspection (SR5)
2. Field inspection results (SR6)
3. Tally counter
4. Protective equipment (gumboots, apron)
Requirements for field inspection

b. field note book
c. pen
The report general information

- General information to include in the report:
  - a. Name of seed grower
  - b. Grower number
  - c. Field name
  - d. Field number
  - e. Location of the farm
  - f. Crop number
The report general information cont’d

g. Variety name

h. Class of seed

i. Total acreage under seed production.

j. Estimated yield at final inspection

k. Number of counts made

l. Crop results (approved, rejected)
Inspection results

- Inspection results (remarks)
  1. Stage of seed crop during inspection
  2. Inspection (1, 2, 3 etc)
  3. Isolation distance (M)
    a. North
    b. South
    c. East
Inspection result cont’d

a. West

4. Name and stage of growth of contaminants

5. Crop Condition

6. Estimated seed yield (Qts/ha)

7. Remarks
# Inspection result - Count

<table>
<thead>
<tr>
<th>COUNT NO.</th>
<th>OFF TYPES</th>
<th>OTHER CROPS</th>
<th>WEEDS</th>
<th>AFFECTED BY SEED BORNE DISEASES</th>
<th>REMARKS I.E NAMES OF CONTAMINANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2</td>
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<td>5</td>
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<td>6</td>
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<tr>
<td>Total</td>
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<tr>
<td>Average</td>
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<tr>
<td>%</td>
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</tr>
</tbody>
</table>
## Inspection result for hybrid seed crop - Count

<table>
<thead>
<tr>
<th></th>
<th>SEED PARENT</th>
<th>POLLEN PARENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>with receptive silks</td>
<td>sheds pollen</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
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<td>3</td>
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<tr>
<td>4</td>
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<tr>
<td>5</td>
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</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
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<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: The table data is placeholder text for formatting purposes.*
Inspection results cont’d

- The results should be signed by both inspector and the growers
- A decision should be made whether to pass or reject the crop based on the inspection standards
- A Copy of the report should be left to the grower and another to the seed merchant
Seed crop rejection
Some reasons for rejection

1. In adequate isolation
2. Drought
3. Poor detasseling
4. Weediness/Noxious weeds
5. Diseases e.g smut, anthracnose
6. Not true to type
7. Poor germination/establishment
8. Not traceable/harvested before inspection
Rejection at Post control

- Post control means variety verification of a certified seed which is not further multiplied.
- Post control monitors how efficient seed production has been in maintaining varietal purity and identifies ways in which the system can be improved.
- Crop can be rejected in the field or at post control.
- Rejection at post control is mainly due to off types and diseases.
Instances of rejecting a seed crop

- **Trueness to type**: if the registered crop doesn’t conformed to descriptor, it shall be rejected.
- **Varietal purity**: if at the final inspection, the female rows shall consist of more than 0.1% off types or 2% doubtful plants, the crop shall be rejected.
- **Weeds**: if the field on account of weeds is not accessible, the crop shall be rejected.
- **Detasseling**: if more than 1% of the female shall be receptive and more than 1% of the male shall be shading pollen at any one inspection, the crop shall be rejected.
Consequences and options for rejected crops

- Crop not meeting the certification standard is rejected for certification
- A rejected crop can be downgrade where applicable
- Rejected seed crop should be deposed in other way but not seed
Consequences and options for rejected crops

- If a crop is rejected at post control, the merchant must stop further distribution of the affected seed lot and retrieve all the seed from its agents.
- A stop sale order is issued to the seed merchant.
THANKS

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