

## B) Post-harvest inspection

QDPM potato seed needs to be stored in diffused light stores (DLS). Other storage forms are not acceptable. Shortly after harvest the WERCOM and COOPCOM inspect all DLS of a given cooperative where QDPM potato seed tubers are being stored. The purpose is to assess the quality of the stored seed tubers and overall storage management and to determine the number of QDPM tags to be given to the cooperative.

The tolerance levels for certain criteria and the corresponding recommendations are shown in Table 2. Of each variety stored in the DLS, the committees should check 500 tubers.

**Table 2: Tolerance levels for imposing recommendations in post-harvest inspection in DLS**

Defects/pests	Recommendations to be imposed
Graded (40 to 70g)	> 10% over- or under-size tubers found, grading is needed
Off-type/mixture	If any varietal impurities found, sorting is needed
Tuber rots	If rotting tubers found, sorting is needed
Defective tubers	If defective tubers found, sorting is needed
PTM	If PTM infected tubers or PTM moths are found, dip of tubers in Diazinon solution and spraying of store is needed
Aphids	If Aphids found inside DLS or on tubers, insecticide application is needed
Soil	If soil weight exceeds 2% of the total weight, the tubers need to be cleaned
Variety labeling & separation	Varieties clearly labeled and separated by physical barrier. If not, this needs to be done
Cleanness	Floor, unused benches and surroundings of DLS are free of rotten or dried up potato tubers and potato plants, if not, cleaning is needed
Tagging (1 tag per quintal)	Estimate quantity of clean seed tubers to provide the correct number of tags for each producer

After successful completion of the DLS inspection and the estimation of the total quantity of seed stored, the owner will be given the corresponding number of tags (1 tag each for 1 quintal of seed). The properly filled in tags need to be attached to the seed bags when they are being dispatched from the store. In case the store does not pass the inspection, the owner should be advised to rectify the situation and a date for a re-inspection should be agreed on. If the store fails the re-inspection, the seed will not be considered as QDPM seed.



# Field Guide for Inspection of Quality Declared Planting Material (QDPM) of Potato



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# Inspection Procedures for QDPM of Potato in Ethiopia

This field guide summarizes the key features and threshold levels of an informal seed inspection system for the production of Quality Declared Planting Material (QDPM). This guide is intended as a quick reference for the persons carrying out the inspections; the process is described in detail in the reference booklet on QDPM inspections.

The QDPM inspection system consists of a two-tiered inspection system, relying on two field and one post-harvest inspection. The system is summarized in Figure 1. The inspections will be carried out by two committees, one at woreda-level (WERCOM) and one at cooperative-level (COOPCOM).

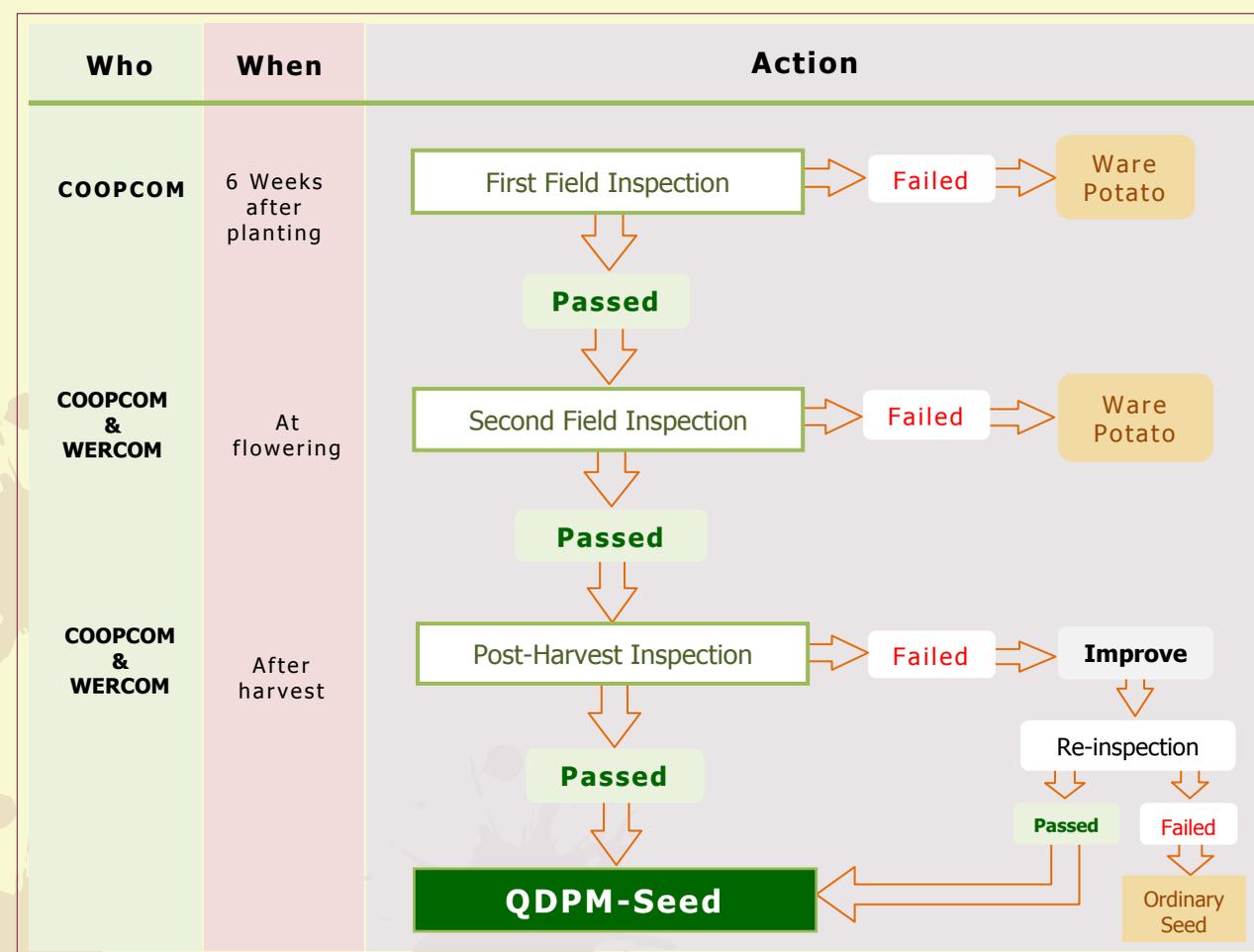


Figure 1: Illustration of informal seed inspection scheme

The WERCOM inspection committee inspects seed potato plots of participating cooperatives. The WERCOM consists of 5 members: (1) Seed agronomist from Wereda-BoA (Chairperson), (2) Plant protection expert from Wereda-BoA (Secretary), (3) Potato Researcher from a nearby Research Center, max distance 40 km (optional), (4) Development Agent (DA) working with the producer, and (5) a representative of the Seed Potato Cooperatives being inspected. Decisions of the WERCOM are taken by majority vote, in case no majority vote is obtained, the chairperson keeps the balance.

The COOPCOM inspection committee inspects all seed potato fields of members of the cooperative. The COOPCOM consists of 3 members elected by the members of the Cooperative. It is suggested that at least one woman is included in the inspection team. Decisions of the COOPCOM are taken by majority vote.

## A) Field Inspection

The tolerance levels for seed potato fields to qualify for the QDPM label are as shown in Table 1. For fields less than 2 ha in size, 10 rows are selected randomly and in each row 100 potato plants are visually checked. For fields greater than 2 ha, an additional 5 rows for every additional 1 ha field is selected and in each row 100 plants are visually assessed.

Table 1: Tolerance levels for field inspection in the QDPM scheme for potato

Requirements/defects/diseases	Tolerance
Rotation of at least	3 years
Incorrect variety (off-type)	1%
Bacterial wilt	Nil
Total viruses (leaf roll + mild mosaic + severe mosaic)	5%

Fields that do not fulfill these requirements should be rejected as QDPM fields. If more than 30% of the inspected fields of a given cooperative fail this inspection, the cooperative should be rejected as QDPM producer for this year.

In addition to these tolerance levels, aphid infestation should be observed, using the following scale:

- Slight (1 to 2 aphids on few plants)
- Moderate (1-10 aphids on most plants)
- Severe (>10 aphids on most plant)

When moderate to severe aphid infestation occurs in the field, the crop needs to be sprayed with a registered pesticide.