



Information Sheet

2.10 Decontaminating mechanical harvesters

Ratoon stunt (RSD) is readily spread on cane knives, mechanical harvesters and planters. It is important to minimise the risk of field-to-field and farm-to-farm spread by contaminated equipment. Chemical disinfectants have been used effectively to minimise spread on cane knives, but recent research indicates that in- or near-to-field decontamination procedures for mechanical chopper harvesters are not completely effective.

To improve the efficacy of the procedure, **cleaning** and **decontamination** of the harvester should be conducted at the depot or farm workshop, preferably while the harvester is raised on the trailer or in a designated area that allows easy access to the undercarriage. Harvesters should not move between farms without going through this process. The procedure should ideally also be followed before entering different fields on a farm.

Useful definitions:

- “Cleaning” - Removal of plant and soil debris.
- “Decontamination” - Reducing the number of micro-organisms, usually with chemicals.

Equipment and parts that need to be cleaned and decontaminated:

- **Harvesters:** gathering disks, crop dividers, toppler, toppler severing disks, knockdown rollers, throat, base cutters, butt-lifter roller, feed rollers, choppers, elevator basket, elevator, primary and secondary extractors, rotating hood (See Figure 1).
- **Planters.**
- **Trailers / Bins** used to transport seedcane.

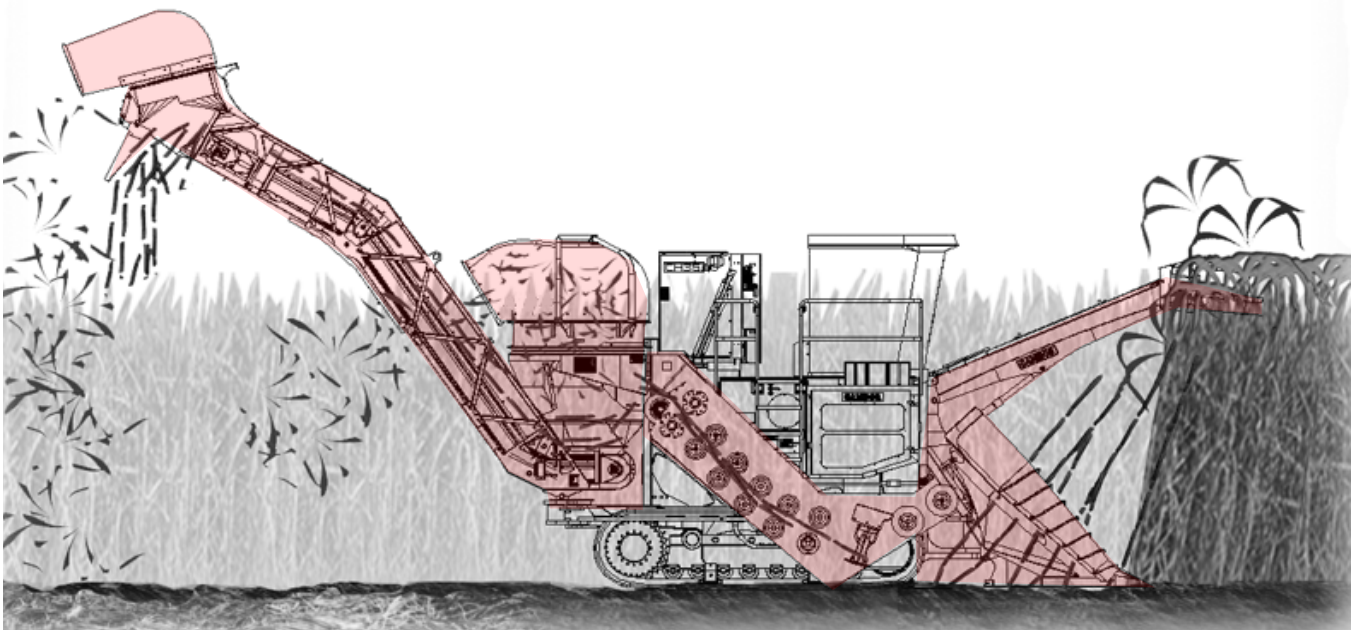


Figure 1: Harvester parts shaded red require decontamination to reduce the risk of RSD transmission.
(<http://manuals.deere.com>)

Procedures to be followed

REQUIRED

Before moving between farms

RECOMMENDED

Before moving between commercial fields

1. After leaving the farm / field, proceed to the farm workshop or machinery depot.
2. Inspect the harvester thoroughly and remove large pieces of plant debris (stalks, leaves, root balls). Pay particular attention to the undercarriage of the harvester and parts that are likely to come into contact with the cut stools in a cane row.
3. Remove all remaining plant and soil debris using a high-pressure hose.
4. Spray disinfectant* onto all parts that are likely to come into contact with the cane row (Figure 1) using a knapsack. Ensure thorough coating of these parts.
5. Allow to stand for a minimum of 10 minutes, preferably overnight.

***Disinfectant**

A foaming quaternary ammonium compound (QAC) containing a combination of benzalkonium chloride and didecyl dimethyl ammonium chloride (6.4% active by mass of formulation) with a surfactant 2-butoxy-ethanol.

The disinfectant should be diluted to 3% (v/v)

Note: This procedure is based on similar work done in Australia. The Australians did not attempt to decontaminate the tracks of the harvester as this is extremely difficult to do effectively.

Before entering the first field on the next farm:

1. Give the grower/manager an opportunity to inspect the harvester on entering the farm. The grower should refuse access if cane and or soil debris is present and there are indications that the harvester has not been properly cleaned.
2. Before removing the harvester from the trailer, spray disinfectant with a knapsack onto all parts that are likely to come into contact with the cane row, paying particular attention to the base plates.
3. Allow to stand for 10 minutes before removing from the trailer.

Notes

- Mechanical harvesters that are also assigned to harvest commercial fields during the season must not be used to harvest Certified or Approved Seedcane.
- Based on the results of the trials conducted, in-field decontamination of mechanical harvesters during the harvesting operation is unlikely to be effective (i.e. stopping the harvester in the middle of a field to decontaminate). If done thoroughly, the process can take up to an hour to complete, and access to some of the parts will be more restricted in the field. The in-field decontamination of mechanical harvesters is therefore not recommended.
- **Equipment requirements include:**
 - ✓ High pressure hose
 - ✓ Knapsack
- **Health and safety requirements include:**
 - ✓ Goggles
 - ✓ Respirator
 - ✓ Waterproof, chemical-resistant gloves
 - ✓ Avoid loose fitting clothing

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