

Threshing and Seed Cleaning

[Harvest Management]

Threshing is done after harvesting to minimize losses owing to shattering of grains. Clean newly threshed grains immediately to preserve the storeability and rice milling quality.

Operating requirements for thresher

Large axial flow thresher is used in commercial and seed production while smaller thresher such as the vogel thresher is used for harvesting experiments.

- Only properly trained operator is allowed to operate the thresher. It is required that the operator wears appropriate physical protective equipment (PPE) during operations.
- When threshing *palay* for seed purposes, thresher must be properly cleaned and free from residual seeds before every use.



Threshing harvested rice

Thresher operation and maintenance

1. Station the thresher near the pile of harvested crops to minimize grain losses in handling and feeding. Place the harvested crops on the feed tray with the panicle away from the operator so that the panicle is fed first into the thresher.
2. For optimum cleaning performance, station the threshers equipped with blowers and oscillating sieves on a level area during operation. Likewise, orient the thresher in such a way that straws are thrown in the direction of the wind to eliminate blowing the straw, chaff, and husk back towards the operator and the threshed grain.
3. Avoid threshing wet *palay* with a mechanical thresher. Wet grains, straws, and other impurities stick to the thresher's oscillating sieves and other surfaces which make separation and cleaning difficult. If threshing wet crop cannot be avoided, reduce feeding rate in the thresher.
4. Examine the peg teeth of the threshing drum regularly for wear. Rotate worn pegs 180 degrees or interchange with those located on the last half of the cylinder. Replace badly worn pegs.
5. Check and adjust the blower opening (shutters) during each threshing operation to give the airflow needed for winnowing. Start with closed shutters then slowly open it to provide more air for a cleaner output until a small amount of mature grains flows over the windboard.

Source: Field Operations Manual. 2007. Philippine Rice Research Institute.