

What is harvesting?

Harvesting is the process of collecting the mature rice crop from the field. Harvesting of paddy includes cutting, stacking, handling, threshing, cleaning and hauling. Good harvesting methods *maximize grain yield* and *minimize grain damage* and *quality deterioration*. Harvesting can be done manually using sickles and knives or mechanically with the using threshers or combine harvesters.

Why is it important to know when to harvest

Correct timing of harvest is crucial to crop loss prevention. Grain losses may occur caused by rats, birds, lodging, insects, and shattering. Timely harvesting ensures good grain quality and high market value.

Harvesting too early will result in a larger percentage of unfilled or immature grains, which will lower yield and in cause higher grain breakage during milling. Harvesting too late will lead to excessive losses and increased breakage in rice. Harvest time also affects the germination potential of rice seed.

How do we determine when to harvest?

There are different ways to the determine the correct harvest time:

Moisture content

Grain moisture content ideally is between 20 and 25% (wet basis). Grains should be firm but not brittle when squeezed between the teeth.

Ripe grains per panicle

The crop should be cut when 80—85% of the grains are straw (i.e., yellow-colored).

Number of days after sowing

Generally the ideal harvest time lies between 130 and 136 days after sowing for late, 113 and 125 for medium, and 110 days for early-maturing varieties.

Number of days after heading

For dry season harvesting, an optimum time is 28 to 35 days after heading. In wet season harvest, optimum time is 32 to 38 days after heading.

Other considerations

Harvesting also needs to be timed so that threshing can be done as soon as possible after cutting to avoid re-wetting and to reduce grain breakage.

If the crop has a lot of surface moisture, (e.g. from previous rainfall or early in the morning), it is advisable to wait until the surface moisture dries off.



Grain color is observed



Take averages of the whole field

Prepared by M. Gummert with inputs from Joe Rickman (2004); updated by M. Gummert (2010).

For more information: visit the Rice Knowledge Bank Web Site (<http://www.knowledgebank.irri.org>), email postharvest@irri.org; or call +63 2 580 5600

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