

RECOMMENDED PRACTICES FOR RICE RATOONING

In areas where adequate water is available after the first crop season, rice ratooning could be practised as an alternative to raising of the second crop in rice double cropping. The ratoon crop matures earlier and requires less labour and water inputs. Water use efficiency is high. Early maturing, high yielding first crop varieties like No.11 and Barket are suitable for ratooning.

The success of a good ratoon crop depends on the care with which the first crop is cultivated in the growing season. Agronomic practices for the first crop determine the success of ratooning and grain yields of ratoonable varieties. Variations in soil, water, light and temperature influence ratooning ability. Tiller development is highly influenced by the carbohydrates that remain in the stubbles and roots after harvest and the level of nitrogen in the soil. Varieties with thick culms/stems store more carbohydrates and are more suitable for ratooning.

AGRONOMIC PRACTICES

Time of harvest

The best time to harvest the main crop for raising a good ratoon crop is when its culms or stems are still green. Stalks should be cut before the main crop is fully matured and dried up so that the stems are physiologically viable for ratoon tillering.

Spacing

The effect of spacing on grain yield of the main and ratoon crops is different from one variety to another. In general, the optimum spacing for good ratoon yield is 20 x 20 cm.

Cutting height

Interactions between varieties and cutting height exist; some varieties tiller better when

cut high, while others produce better tillers when cut at lower levels. For short-statured varieties like No.11 and Barket, a cutting height of 15-20 cm is optimum. Further reducing the cutting height increases the number of missing hills in the ratoon crop.

Water management

Excess flooding immediately after main crop harvest can cause rotting of stubbles and can retard tiller formation. Keep the field drained but moist for about 10 days after harvest to promote sprouting and tillering. Thereafter, irrigate the field as in the main crop.

Fertilizer management

Studies on fertilizer requirements show that a ratoon crop needs nitrogen at the rate of 75% of the main crop. P and K are usually adequate and do not respond upon application. For Wangdi-Punakha valley, topdress N at the rate of 50 kg/ha after 20-30 days of harvesting the main crop.

Weed control

Weed intensity in a ratoon crop depends very much on the control measures applied to the main crop. A thorough handweeding should be carried out 20-30 days after harvesting of the main crop during the time of topdressing.

HARVESTING

Harvest the ratoon crop when over 80% of the grains are matured and turn straw-coloured.

YIELD

On an average, ratoon rice can give a yield roughly equivalent to 40% that of the main crop, with 40% reduction in crop duration.