Effect of Harvesting Methods on Seed Yield and Quality of Purple Guinea Grass

(Panicum maximum TD.36) Produced by Small Farmers in Khon Kaen*

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Abstract

The on-farm research on seed harvesting methods of purple guinea grass was conducted in 10 small farms at Nong Wang village, Khon Kaen province in 1994. Each farmer had two methods of seed harvesting: (1) shaking the tied seedhead every 3-5 days, (2) covering the tied seedhead with a net nylon bag with outlet for extracting seed every 3-5 days.

It was found that the bag covering method showed superior seed yield and seed quality than the shaking method. An average pure seed yield of 126.8 kg/rai (highest yield 222 kg/rai) was obtained with the bag covering method, compared to the 91.5 kg/rai from the shaking method. For seed quality, the bag covering method gave a significantly higher 1,000 seed weight (1.398 vs. 1.327 gm.) and slightly higher seed viability and germination than the shaking method, 92 vs. 89% and 81 vs. 77%, respectively.

The farmers received a higher net profit of 7,944 baht per rai from the bag covering method. This was despite the requirement for more labour and the input of bag’s which were 7 bath each but could last many years. The farmers suggested enlarging the bag lengths and the bag outlets, which would minimize the seed collection time by reducing the collection frequency.

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