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摘要: The lengths of mesocotyl in the seedlings of 84 lowland rice varieties and 12 upland rice varieties were measured following the treatments of daylight and darkness during germination. The elongation of mesocotyl in the varieties tested was inhibited under daylight condition, and the mesocotyl of all the varieties elongated variably under darkness condition. The elongated lengths of the mesocotyl in upland rice, ranging from 0.36 cm to 1.61 cm with an average of 0.81 cm, was obviously longer than those in lowland rice, ranging from 0.12 cm to 1.56 cm with an average of 0.42 cm. Among 14 rice varieties with over 1 cm of mesocotyl length, five belonged to upland rice, and nine to lowland rice. The possible utilization of the elongated-mesocotyl rice germplasm in varietal improvement, direct-seeded planting and seed purity testing were discussed.

关键词: mesocotyl elongation; screening; germplasm; rice

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