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**THE IMPACT OF GROWTH PROMOTANTS AND RETARDANTS ON SECOND CROP PRODUCTION IN DRILL-SEEDED RICE**

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Grain filling in the first crop must be completed before initiation of second crop growth in tropical and subtropical, lowland rice production. The ability of plant growth regulators to stimulate second crop production during the period of grain filling in the first crop was explored. Gibberellic acid and cell division inhibitors were applied during grain filling of the first crop, approximately 1 to 4 weeks before harvest. Little impact was noted on first crop yield and maturity, and yield in the second crop was increased significantly. Time of application and rate of the plant growth regulator had variable effects. There was no impact on total crop (first plus second crop) grain yield.