

INTRODUCTION.

ABSTRACT.

Rice is one of the major crops, ranking third after wheat and maize in volume of production (Anon. 1955). Factors involved in direct seeding of rice are reviewed. An area was laid out so that each plot could be irrigated and/or drained completely independently of other plots, and investigations were commenced into varietal and treatment (flooding versus non-flooding) responses of rice, snail damage and control, water control and copper toxicity; and some of these were further investigated in pot tests. Of three species of freshwater snails identified one was present in large numbers and was shown conclusively to damage rice; a significant relationship was demonstrated between snail population and rice establishment; and a significant reduction of snail population was obtained by copper sulphate and dieldrin but further investigations are necessary into techniques and rates of application necessary to achieve adequate control. The involuntary introduction of extraneous factors reduces the value of rice establishment results which are further confused by the incomplete control of snails; in three different experiments flooded plots were significantly better, significantly worse and not significant, and further investigations are required. Water control was not satisfactory until the installation of a gravity flow enabled a constant level of water to be maintained in the plots. No conclusions can yet be reached regarding copper toxicity.

- (1) To increase the area under production,
- (2) To increase the production per unit area, and
- (3) A combination of (1) and (2).

APPLICATION TO TRINIDAD.

While it would appear from Steer & Benson (1953) that there is no accurate estimate of the area of land (a) in production, (b) but not cultivated, or (c) suitable for enclosure.