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# 2. Comparative Study of Sett Planting and Settling Transplanting System of Sugarcane

Yukio ISHIMINE*, OM.A.HOSSAIN*, Keiji MOTOMURA**, Hikaru AKAMINE*,
Seiichi MURAYMA**and S.M.M.UDDIN**
*Agricultural Experiment Station, **Department of Bioproduction,
College of Agriculture, University of the Ryukyus. Okinawa. Japan.

**Objective:**

To study the effect of sett planting and settling transplanting system ofsugarcane on weed control in sugarcane field.

**Materials and Methods:**

The experimentincluded two treatments namely, Sett planting and Settling transplanting of sugarcane. The plot size was 15㎡ ( 3 m × 5 m ) and each plot consisted or three rows. In sett planting system, setts were planted directly in the trench and in settling transplanting system, 35 days old settlings raised in plastic tray were planted in the trench.

**Results and discussion:**

1. Sugarcane took long time (50days) to emergence and about 19% of sugarcane did not germinate caused gapping in the rows which enhanced rrowth of vigorous weed population in sett planting field.

2. Settlingtransplanted cane reduced the weed of 33% (fresh). 34% (dry) at weeding teme;and 43% (fresh). 42% (dry) at harvesting time, respectively for higher population and faster growth of cane compared with sett planted cane.

3. Tiller, millable cane and stalk length were reduced by 24%, 36%and 45%, respectively in sett planted cane for higher population and faster growth of weed compared with settling transplanted cane.

4. Settlingtransplanted caneincreased total stalk dry weight, total shoot dry weinght and yield of cane by 79%, 69% and 85%, respectily for less weed production over sett planted cane.

The experimental results suggests that the settling transplanting is one of the important agronomic practices which is able to control weed growth in sugarcane field for better yield of sugarcane crop.