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EFFECT OF WEIGHT OF SUCKERS OF NENDRAN BANANA ON PLANT GROWTH AND YIELD.

In Kerala, Banana is an important fruit crop cultivated in plantation and homestead scale. Of the multitudes of varieties grown nendran which is used for culinary, dessert and preservation purposes is the most important. Studies conducted on the effects of planting material on the ultimate growth and yield of vegetatively propagated crops are rather scanty. Arakeri and Patil (1956) have reported the beneficial effect of large sized bulbs of onion used for planting. Ramaswamy Chokalingam (1975) found positive correlation between the weight of tubers planted and yield of flowers in Tuberosa, the maximum yield of flowers being obtained by using greater length of tubers. Singh and Singh (1975) reported that pineapple suckers of higher weight contributed for better yield and size of fruits. Bhan and Mazumdar (1958) studied the effect of planting banana suckers of four age groups in two different seasons. Yield attributes were high by using three month old suckers of Kabuli variety while in Martaman variety, there was no significant difference due to age of suckers. The influence of weight of banana suckers on the plant growth and yield was studied in Banana Research Station, Kannara during 1976--77.

Banana suckers of five different weight groups namely 1.5, 2.0, 2.5, 3.0 and 3.5 kg. were selected. The suckers were prepared by drying them in the shade and cutting to 25 cm length. The sword suckers of three to four months old were used. The trial was laid out in R. B. Design with four replications adopting a spacing of 2 m x 2 m between plants and rows. Till the shooting of the plant crop' desuckering was done using kerosine treatment. Weight and girth of plants and number of leaves at the time of shooting, the sucker production after shooting until the time of harvest, bunch weight, number of hands and fruits per bunch at the time of harvest, were recorded. The data were statistically analysed and results obtained are presented in Table 1.

The data reveal that the treatment differences are not significant for all the plant growth characters studied. Suckers of weight 2 kg. have contributed for the maximum height and girth of the plants. In respect of sucker production, the treatment effects are significant, the trend being that suckers of higher weight tending to produce more daughter suckers. The treatment effects on average bunch weight, number of hands and fingers per bunch are significant. The sucker weight and these characters appeared to show reverse trend. This observation is different from what has been reported for sexually propagated plants by Panse and Khargonkar (1949), who found a positive response between the size of tuber and yield in Onion. Singh and Singh (1975) have

Table I

The effect of weight of suckers on morphological and yield characters of Banana variety "nendran"

Weight of suckers	Height (cm)	Girth of plants (cm)	Mean No. of leaves per plant	Mean No. of suckers per plant	Bunch weight (in Kg.)	No. of hands per bunch	No. of fingers per bunch
1.5 Kg.	301.81	55.64	14.25	2.47	9.53	5.53	55.62
2.0 Kg.	302.72	56.65	14.96	2.75	9.43	5.22	50.87
2.5 Kg.	300.65	56.27	14.45	3.71	8.82	5.17	49.75
3.0 Kg.	302.56	55.65	14.17	4.08	8.71	5.14	49.51
3.5 Kg.	295.32	54.86	15.10	4.46	7.51	4.82	43.09
CD at 5% level	NS	NS	NS	0.56	0.71	0.23	3.70

also reported that larger suckers, in pineapple account for higher yields. Bhan and Mazumdar (1958) although found variation with the number of fingers per bunch with length of suckers, they have reported that varietal variations exist in this respect. This study has indicated that in Nendran variety banana, it is advisable to use three to four months old suckers of weight 1 to 2 kg for securing higher yield. It is customary in Kerala among cultivators to use four montn old suckers for planting. This study has helped to standardise the type of suckers that is to be preferred by the cultivator taking weight as a criterion.

സംഗ്രഹം

നേന്ത്രൻ വാഴയിൽ വിത്തുമാണത്തിന്റെ തൂക്കവും raisjoto ലഭ്യമായ വാഴയുടെവളർച്ച, ഉല്പാദനഷമത, എന്നിവ തമ്മിലുള്ള ബന്ധത്തെക്കുറിച്ച് ഒരു പഠനം കണ്ണാറ വാഴഗവേക്ഷണകേന്ദ്രത്തിൽ 1976–ാം ആണ്ടിൽ നടത്തപ്പെട്ട. പഠനത്തിൽനിന്നും വിളമാണത്തിന്റെ തൂക്കവും തദ്വാര ലഭിച്ച വാഴച്ചെടികളുടെ വളർച്ചയും തമ്മിൽ ബന്ധമുള്ളതായി കണ്ടില്ല. കൂടുതൽ തൂക്കമുള്ള വിത്തുമാണം, കന്നുകാം ഉല്പാദിപ്പിക്കുന്നതിൽ കൂടുതൽ ഷമതകാണിച്ച. എന്നാൽ ഉല്പാദനത്തിൽ വിത്തുമാണത്തിന്റെ തൂക്കക്കൂടുതൽ വിപരീതഫലങ്ങളാണ് നല്കിയതു. നാലു മാസം പ്രായമായ ഒന്നരണ്ടുകിലോ തൂക്കമുള്ള വിത്തുമാണങ്ങാം കൂടുതൽ ഉല്പാദനക്ഷമതയുള്ളവയാണെന്നrao നടുവാൻ ഉപയുക്തകമാണെന്നും തെളിഞ്ഞു.

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