Agri. Res, J. Kerala, 1977, 15 (2)

EFFECT OF TRAINING AND PRUNING TRIALS ON THE YIELD OF PEPPER

Training and pruning methods in general have received a great deal of attention from research workers in many lands and consequently many systems have been evolved to suit the different sets of conditions. Although support or 'Standard' is provided for training, no definite system of training or pruning are recommended for pepper so far. The method and degree of pruning severity have a bearing on the yields of vines. The fruit-set of vines in grape varieties was reduced with the increased severity of pruning. (Winkler 1926.a)

The present investigation was carried out to assess the best methods of training and pruning to be adopted for maximising production in pepper. The studies were conducted at the District Agricultural farm, Neriamangalam, under the scheme for Research on pepper. The variety used was 'Karimunda' a variety popular in the southern and central regions of Kerala. The experiment was laid out in Randomized Block Design, replicated six times. The planting was done in the year 1968, with a spacing of 3 x 3. The treatments were pruning one year old vines at a height of four nodes from the ground leavel (T_1), pruning at a height of eight nodes from ground level during second year and pruning at a height of twelve nodes from ground level during the third year. (T_2), detaching one year old vines from the standards and burying in soil after coiling with 6" of the terminal portion exposed (T_3) and Control (T_4—no training and pruning). Each plot comprised of four observational plants excluding border rows. Observations were recorded from Individual vines for four years (1972-'75').

The data and results of analysis are presented in Table 1.

Table 1

Mean yields from Plots of pepper subjected to different types of training and pruning

Treatments.	1972	1973	1974	1975	Mean
T_1	0.866	9.457	4.892	8.459	3.669
T_2	0.033	1.038	2.651	6.400	2.530
T_3	0.79 >	1.148	5.375	6.078	3.340
T_4	1.377	0.563	5.075	6.558	3.393
Significance:	S	N. S.	N. S.	N. S.	N. S
C. D. *(5%)*	0 830				

The analysis of the data for the second, third and fourth years and the pooled analysis for the entire period indicated that there was no significant difference in the mean yields due to treatments, although, significant differences were observed in the first year. Treatment T, was found to be significantly inferior to 'control' and T_1. Winkler (1926) reported that severe pruning reduced yield in grape vines, in which pruning is a common practice. The significant difference in the first year indicated that severe pruning affects growth adversely in the early stages of the crop.

സംഗ്രഹം

കരുമുളകു് ചെടികളം പ്രൂണിംഗു്, ട്രെയിനിംഗു് എന്നീ പ്രയോഗങ്ങളംക്കു് വിധേയമാക്കിയാൽ കൂടുതൽ വിളവു് ലഭിക്കുന്നതിനു് സഹായകമാണോ എന്നു് പരീക്ഷിക്കുകയുണ്ടായി. നേര്യമംഗലം കരുമുളകഗവേഷണ പദ്ധതിയുടെ കീഴിൽ 1972 മുതൽ നാലുവർഷം തുടർച്ചയായി നടത്തപ്പെട്ട പ്രസ്തുത പരീക്ഷണത്തിൽ നിന്നും പ്രൂണിംഗും, ട്രെയിനിംഗും വിളവിനെ സാരമായി ബാധിക്കുന്നില്ലെന്നും കണ്ടു. എന്നാൽ അവയുടെ പ്രയോഗം നിമിത്തം ഒന്നു രണ്ടു വർഷം വരെ ചെടിയുടെ വളർച്ചയെ പ്രതികൂലമായി ബാധിക്കാമെന്നും കണ്ടു.

REFERENCE

A. J. Winkler 1926. Some responses of *Vitis vinefera* to pruning. **Hilgardia I,** 526—43.

Department of Botany,
College of Agriculture,
Vellayani.

K. SIVAN PILLAI

(M. S. Received: 4-11-1976)