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### EFFECT OF 'PLANOFIX' FOLIAR SPRAYING ON SOME VARIETIES OF CAPSICUM

Yield is a major factor deciding the economical value of a crop. It is an integrated final product of so many physiological activities in the plant and the hormones have an important role in this connection as biochemical regulators. Attempts with planofix (alpha naphthalene acetic acid) in several crops like cotton, groundnut, mangoes etc. indicate its use as an inhibitor of flower and fruit shedding and as an yield stimulator. The present study is conducted to trace the response of different varieties of chillies to Planofix treatment.

Bhatt and Date (1955) first reported increase in yield seed cotten by the application of planofix. Bhardwag and Santhanam (1964) studied the effects of cotton yield along with application of fertilisers and reported that planofix treatment resulted in increased yields. Sivasubramoniam and Rajamani (1972) reported that by two sprayings of planofix higher yield can be obtained in the chilli variety K 1.

Six varieties of chillies viz Black Suryamukhi, Nileswar local, Taliparamba local, Kantari, Cherry red cluster and local blue were selected and used for the study. Planofix at the dosage rate of ml. diluted with 2.25 litres of water (20 ppm) was used for spraying. The foliar spraying was 10 days after transplanting ie. at the flower initiation stage. Fifteen plants were treated with Planofix and five plants were left as control in each variety. The total number of fruits produced by the treated plants and their control were recorded.

**Table 1**

Sl. No.	Mean Number Treated	of fruits/plant Control	% of increase over control
1. Black Suryarmkhi	22.9	14	63.60
2. Nileswar Local	116.5	69	68.80
3. Taliparamba Local	65.1	42	55.00
4. Kantari	131.6	56.5	132.90
5. Cherry red cluster	51.1	47.5	7.60
6. Local blue	67.0	63.3	5.80

The data on the average number of fruits per plant in all the six varieties indicate that there is definite increase in fruit yield in the treated plants over their control. The increase ranges from 5.8 to 132.90%. The mean number of fruits in treated and control plants in all six varieties is given in the Table. 1.

Out of the six varieties, four varieties viz. 'Kantari', 'Nileswar local', Black Suryamukhi and Taliparamba local record more than 50% increase in fruit yield, the increase being the maximum in 'Kantari'

The higher yield of fruits in the treated plants may be due to the increase in the production and development of flowers and also due to non-shedding of flowers and fruits.

സംഗ്രഹം

മുളകിന്റെ ആറു വ്യത്യസ്ത ഇനങ്ങളിൽ 'പ്ലാനോഫിക്സ്' എന്ന സസ്യഹോർമോൺ 20 ppm. എന്ന കണക്കിൽ വെള്ളത്തിൽ കലക്കി പൂവിട്ടന്ന ദശയിൽ സുപ്രേ ചെമ്പുതൂലും ഉല്പാദനം 5.8 ശതമാനം മുതൽ 132.9 ശതമാനം വരെ വർദ്ധിച്ചതായി ഒരു പ്രാഥമിക പരീക്ഷണത്തിൽനിന്നും തെളിഞ്ഞിരിക്കുന്നു.

REFERENCES

Bharadwai S. N. and Santhanam V. 1964. Physiological studies on bud and boll shedding in cotton 1 - Influence of hormone NAA and its interaction with fertiliser application. *Ind. Colt. Gr. Rev;* **18**, 203 - 212

Bhatt J. G, and Date R. V. 1955. Effect of alpha - Napthalene acetic acid on yield of Indian Cotton *Nature* (London) 44, 175

Sivasubramonian and Rajamoni 1972. Planofix spraying increases the yield of Chillies *Tch. Bull.* 1 I Pub: Additional Director of Agriculture **Tiruchirapalli** - 18, Tamil Nadu

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