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STUDIES ON THE INFLUENCE OF FERTILIZER REGIMES AND WEATHER ON FLOWER PRODUCTION, TYPE OF FLOWER AND FRUIT - SET IN LEMONIME HYBRID

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The cultivated citrus species usually produce hermaphrodite flowers, but male flowers with aborted overiea are found in Lemon*(C.limon)* and Citron *(C.medica.* Lemonime is a swing between lemon and lime *(C.aurantifolia)*. Lemonime produces both male and hermaphrodite flowersas in the lemon parent.

The relationship among environmental factors (number of days of precipitation total precipitation, mean maximum temperature, per month), flower production and fruit-set was studied on three year old lemonime plants at Adaptive Research Station, Walpita in Wet zone (W.P.). The effect of inorganic fertilization (0, 1/2, 1, 1 1/2 times Dept. of Agriculture recommendation for citrus-non-bearing 15:15:7 and bearing 12:14:14 of N_2, P_2O_5 and K_2O) and addition of organic manure on flower production was studied.

Mean number of flowers produced per plant per month was not significantly correlated singularly to monthly Rainfall, Number of days of precipitation Mean

maximum temperature and mean minimum temperature for the months studied. Though Lemonime produces flowers throughout the year, flower production is significantly high during a few months.

The flower productionwas significantly (0.01) increased by addition of inorganic fertilizer. Addition of organic manure further increased the flower production significantly (0.05).

The fruit-set was not influenced by the fertilizer regimes and not significantly correlated to the environmental factors tested during the period of study.

The percentage of fruit-set per month significantly varied during the experimental period. A strong recommendation of Agro-ecological zones for Lemonime cultivation could be made with further studies on the influence of soil moisture regimes on flower production, fruit-set and fruit abscission.