



EUPATORIUM AS A FOOD-PLANT FOR PARASITES OF WHITE GRUBS

Eupatorium pallescens is a bushy evergreen plant of the Family Compositae that was introduced from Java in 1936 by Dr. W.F. Jepson, who was at that time "Phytalus Investigation Officer" at the Department of Agriculture. The plant blossoms throughout the year, producing dense clusters of white flowers, and is attractive to many insects as a source of nectar. The purpose of introducing the plant was to propagate it in areas of Mauritius where nectar-bearing flowers were absent or scarce, as the imported Scoliid parasites of *Clemora smithi* ("Phytalus") do not frequent areas where they cannot find such flowers upon which to feed. More particularly, the idea was to propagate it among sugar cane fields where these extend over large areas to the virtual exclusion of nectar-bearing plants.

Eupatorium, at present, grows wild and often flourishes on waste land, etc., in upland localities. In dry lowlands, however, and in some upland areas, the plant is scarce or absent. Some cane planters who grew *Eupatorium* alongside their cane fields gave up the practice because the plant is sensitive to herbicides. At present, nectar-bearing flowers are absent from the vicinity of most cane fields.

It is recommended that the practice of planting *Eupatorium* here and there alongside cane fields be revived in all areas, but especially in the lower subhumid localities. By so doing, the activities of the parasites that attack *Clemora smithi* and other white grubs would be encouraged.

Methods for propagating *Eupatorium* are described in *La Revue Agricole*. Vol. 28 (1949), pp. 296-7. These may be summarized as follows:

Propagation by cuttings

Dip the lower end of a cutting in a suspension of Benlate

(0.5 g/litre) and then immerse the entire cutting in molten paraffin wax of low melting point. This treatment reduces rotting and drying-out of cuttings before they can 'strike'.

Propagation by seed

Pick fruit clusters when they have begun to redden and allow to dry for a few days. Rub them between the hands to extract the seeds. Sow the seeds at once in a seed bed in shallow drills and cover lightly with soil. The drills should be about 3" apart. Provide top shade of palm leaves about 2' above the bed. Water twice daily using a fine rose.

Germination will occur 2-3 weeks after sowing. One hundred grams of seed will give about 2000 seedlings.

Four weeks after germination, transplant the seedlings to small pots or small plastic bags, etc. Keep in shade for a week, then move out into the open. No manure should be mixed with the potting soil to force the young plants but a very weak solution of ammonium sulphate (0.25 g/l) may be applied. Seedlings are ready for planting in the field when about 6" tall. This should be done preferably in the afternoon and water applied; in dry localities provide shade for 3 or 4 days.