

Impact of Weeds on Flowering of Bee Forages

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The impact of weeds is needs to be evaluated since few if any chemical methods are available to growers of these herb species. In this study anise hyssop and catnip seedlings were transplanted May 28, 1995 into a farmers field, in rows 60 cm apart and 30 cm between plants in the row. Treatments were: weedy check (no weed control), hand cultivated to control all weeds, and a mulching treatment consisting of a 5 cm thick layer of rye (*Secale cereale*) straw on top of two sheets of newspaper placed on the soil surface between the anise hyssop rows. Inflorescence number was determined from 5 plants harvested from the center row of three row plots for each of the 3 replications. Flower number was estimated from inflorescence length for anise hyssop as follows: $\text{Flower\#} = -310.9 + 132.8 \times \text{length}$, ($r^2=0.93$); and from inflorescence weight for catnip: $\text{Flower\#} = 80.72 + 381.3 \times \text{weight}$, ($r^2=0.88$).

Controlling weeds is necessary for adequate development of inflorescences and flowers (Figs. 1 and 2). Inflorescence number in the weedy check was only 8% of inflorescence number in the hand weeded plots for anise hyssop and % for catnip. The mulch treatment effectively controlled weeds in this establishment year. These plots had no weed growth while plants in the weedy check were essentially smothered by weeds soon after being transplanted into the farmers field.

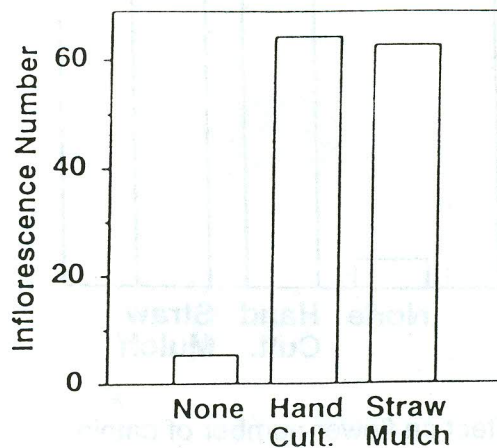


Figure 1. Weed control effect on inflorescence number of anise hyssop

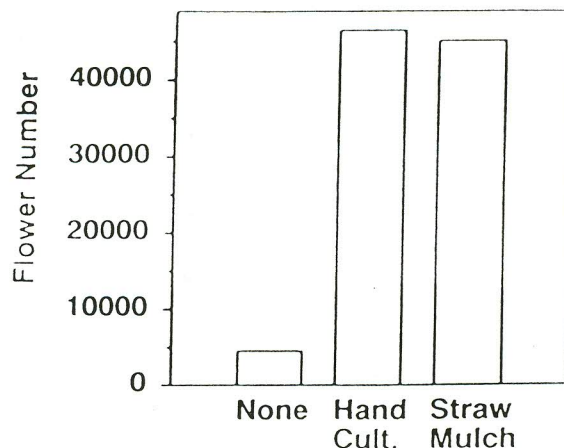


Figure 2. Weed control effect on flower number of anise hyssop.

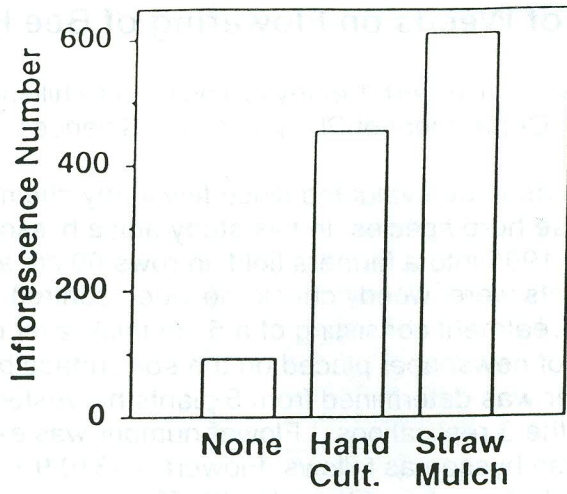


Figure 3. Weed control effect on inflorescence number of catnip.

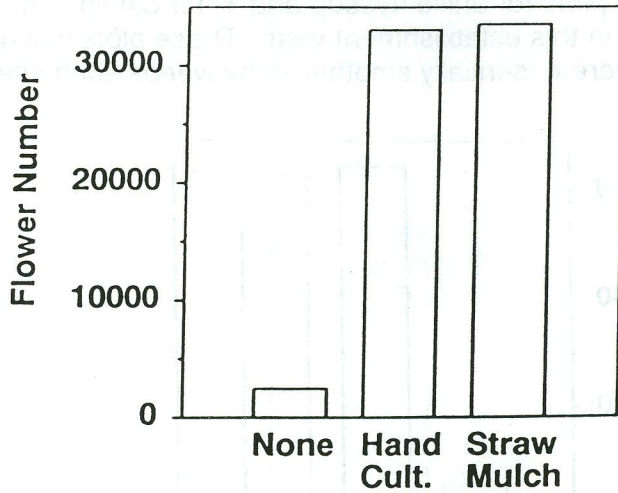


Figure 4. Weed control effect on flower number of catnip.