## INFERTILE BLOSSOMS THE CAUSE OF BARRENNESS.



HE cause of barren orchards was under discussion at our meeting at Woodstock, and Horticulturist Craig, of Ottawa, gave his opinion that in many cases this state of our orchards is due to infertility of blossom. With a view of further investigating the subject, Mr. Craig read a very interesting paper on The Blossoming Period of Fruit Trees, which showed (1), the time of blossoming of the different

varieties in the same locality, and (2), the different times of blossoming of the same variety in different parts of our country. Evidently if it is necessary to have the blossom of our varieties fertilized by the pollen of another variety for fruitfulness, the varieties must be such as bloom at the same period. In this connection the following extract from Bulletin 102 of Cornell University will interest our thoughtful readers:—

In late years it has been observed that some varieties are commonly infertile with themselves; that is, the pollen of one variety is more or less impotent upon flowers of the same variety. The subject is very little understood, and it is not yet safe to generalize upon it; but it is a good practice to plant varieties in alternate rows or only two rows together, to insure free fertilization. Some of the varieties of apples and pears which have been studied in this respect (by Waite and Fairchild) are as follows:—

## Apples.

Varieties more or less self-sterile.—Bellfleur, Chenango, Gravenstein, King, Spy, Norton, Melon, Primate, Rambo, Red Astrachan, Roxbury Russet, Spitzenburg, Talman Sweet,

Varieties generally self-fertile.—Baldwin, Codlin, Greening.

## Pears.

Varieties more or less self-sterile.—Anjou, Bartlett, Boussock, Clairgeau, Clapp, Columbia, Easter, Gray Doyenne, Howell, Jones, Lawrence, Louise Bonne, Mount Vernon, Sheldon, Souvenir du Congres, Superfin, Colonel Wilder, Winter Nelis.

Varieties mostly self-fertile.—Angouleme, Bosc, Buffum, Diel, Flemish Beauty, Kieffer, Le Conte, Manning's Elizabeth, Seckel, Tyson, White Doyenne.

It is probable that many trees fail to bear because propagated from unproductive trees.—We know that no two trees in any orchard are alike, either in the amount of fruit which they bear, or in their vigor and habit of growth. Some are uniformly productive, and some are uniformly unproductive. We know, too, that cions or buds tend to reproduce the characters of the tree from which they are taken. A gardener would never think of taking cuttings from a rose bush or chrysanthemum or a carnation which does not bear flowers. Why should a fruit grower take cions from a tree which he knows to be unprofitable?

The indiscriminate cutting of cions is too clumsy and inexact a practice for these days, when we are trying to introduce scientific methods into our farming. I am convinced that some trees cannot be made to bear by any amount of treatment. They are not the bearing kind.