

the plum—  
for the help—

Professor  
Department,  
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the Crescent

Naite, when  
pear-flowers,

is the most  
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Be sure there  
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New Yorker

ses near Bos-  
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e in Blossom.  
s necessary to  
as I dare say

our orchardists are well aware that spray-  
ing trees with the usual poisonous mix-  
tures while in blossom is not only inju-  
rious to the blossoms themselves by de-  
stroying the pollen, but also poisons the  
bees which visit them, thus defeating the  
object every orchardist should keep in  
view—the cross-fertilisation of the blos-  
soms. In a number of the American  
states there are laws against doing so.

Fortunately, the ignorant prejudice  
against bees common some years ago  
amongst viticulturists and other fruit-  
growers is fast dying out. It was believed  
at one time in America that bees punc-  
tured and destroyed grapes and other  
delicate fruits, and, notwithstanding that  
the results of exhaustive experiments  
conclusively proved the contrary, it took  
a long time to convince them they were  
wrong. Bees cannot puncture sound  
grapes, but during a dearth of honey  
they will suck the juice from ripe grapes  
and other fruits after they have been  
punctured by some other animal, or have  
burst through over-ripeness. Sound  
grapes smeared with honey have been  
put into a hive containing a starving  
conony of bees; the honey has quickly  
vanished, but not a grape has been in-  
jured. Bunches of ripe grapes have  
been left in four or five hives at a time,  
directly in contact with the bees, and  
after three weeks every grape was per-  
fectly intact, but glued to the combs.

I could go on quoting the opinions of  
many other able authorities in the same  
strain, but enough has been said to con-  
vince orchardists, if it were needed, that  
it is vital to their interests either to keep  
bees or to see that there are plenty in  
the neighborhood of their orchards. It re-  
mains only for me to say to those who  
wish to follow up their investigations on  
this subject, I would recommend them to  
read the works of Darwin, Mulsant, Lord  
Dveagh (Sir John Lubbock, and Cheshire.

I would point out that in New Zea-  
land we have not the number of fertilising

insects there are in Europe or America,  
consequently we are even more dependent  
on the hive-bees than are orchardists in  
those quarters of the globe. I think I  
am correct in saying there are practically  
no other insects but the hive-bees about  
in New Zealand when fruit-trees are in  
blossom. Finally, as a summary, I will  
quote the conclusions of Herman Muller  
on the comparative value of bees as fer-  
tilisers. He says in his great work on  
"The Fertilisation of Flowers,"—

"Bees, which not only feed on the pro-  
duce of flowers, but nourish their young  
also thereon, are in such intimate and  
lifelong relations with flowers that they  
show more adaptation to a floral diet,  
and are more important for the fertiliza-  
tion of our flowers, and have, therefore,  
led to more adaptive modifications in  
these flowers, than all the foregoing or-  
ders (of insects) put together.

Bees, as the most skillful and diligent  
visitors, have played the chief part in the  
evolution of flowers; we owe to them the  
most numerous, the most varied, and  
specialised forms. Flowers adapted to  
bees probably surpass all others together  
in variety of color. The most specialised,  
and especially the gregarious, bees have  
produced great differentiations in color,  
which enable them on their journeys to  
keep to a single species of flower. While  
those flowers which are fitted for a mis-  
cellaneous lot of short-lipped insects usu-  
ally exhibit similar colors (especially  
white or yellow) over a range of several  
allied species, the most closely allied  
species, growing in the same locality,  
when adapted for bees, are usually of dif-  
ferent colors, and can thereby be recog-  
nised at a glance (e. g., *Trifolium*, *Lam-  
ium*, *Tenerium*, *Pedicularis*).—Isaac Hop-  
kins.

Remember—bees have no food where  
they are rearing their babies. Feed them.