

## BEE BOTANY AND ENTOMOLOGY.

### WATER LEAF AS A HONEY PLANT.

**ENCLOSED** please find a specimen of a honey plant. It blooms early in spring, and is found in the valleys on very rich soil. I consider it A No. 1, as it comes before white clover. Please define it in GLEANINGS. M. A. GILL.

Viola, Richland Co., Wis., Dec. 15, 1879.

The plant is a beautiful one, both in leaf and flower. Here is the answer of Prof. Beal in regard to it.

This is *Hydrophyllum Virginicum*, or water leaf. There are several species found on rich land in the woods and open places. *Nemophila* belongs to the same small natural order.

### THE TOCHINA FLY; IS IT AN ENEMY?

**Friend Root:**—Enclosed you will find some kind of a bee, which is hovering around my hives and eats honey like the bees. It has bristles on its body. Please tell me if they will do any harm, when they are plenty. D. F. C. HAMBLBY.

Spanish Ranch, Plumas Co., Cal., Nov. 20, '79.

We sent the fly to Prof. Cook, and here is his reply:

The insect is not a bee, but is a Tochina fly. It has two wings. A smaller fly of the same genus is figured on p. 270, of my Manual. These flies love sweets, and so are often seen around flowers. They are near relatives of our common house flies, but differ widely in their habits. These flies lay their eggs on other insects. The young, when they hatch, enter and feed on the insects which receive the eggs. Whether these insects were after honey, or were stealing in to lay their eggs on the larval bees is an important question. If the former, their damage is light; if the latter, then it is more formidable. True it is, that some of these Tochina flies are parasitic on bees. I wish Mr. H. would send me several carefully packed in cotton. I am desirous to get all the bee enemies I can for a monograph. A. J. COOK.

Dayton, Ohio, Jan. 5, 1880.

### PURPLE THOROUGHWORT AS A LATE HONEY PLANT.

Will some of your readers tell me, if they have tried *Eupatorium purpureum* for bees? I have seen it covered with bees in the fall, when all other plants had been killed by the frost. The flowers are purple. They are small, but numerous, like elderberry blossoms. Perhaps Prof. Cook would give some information, as this is easily grown in any swamp or wet place. G. H. B. HOOPER.

Toronto, Ont., Can., Jan. 7, 1880.

### BLUE THISTLE PLANTS.

I have no seed of blue thistle, but will send you plants by the thousand, if you will pay the express on them. J. L. BOWERS.

Berryville, Va., Jan. 10, 1880.

That is too cheap, friend B. We do not want anybody to work for nothing. If the plants are very plenty, perhaps you can take them up and put them in a little basket, for 25c. per hundred. I will pay you that for 100, and will pay for the basket too. If anybody else wants some, let them write you so, sending the 35c. I suppose a basket will cost you about a dime.

### BLUE THISTLE IN MICHIGAN.

I see you speak about blue thistle seed. I think I can get a quantity next fall, if you wish. I am well acquainted with that kind of thistle. It commences to blossom the second year from seed, about the first of June, and produces honey in great abundance, till frost comes, and then dies, root and all. Sow the seed in the fall, and when it is once sown, there is no more trouble; there will always be plenty of it. It will scatter all over the neighborhood, and can't be beat for honey.

CLARK SIMPSON.

Flushing, Genesee Co., Mich., Jan. 10, 1880.

I was not before aware that the blue thistle was found north of Virginia and Tennes-

see; but, if our friend has made no mistake, it will probably grow all over the north.

### A VISIT FROM AN OLD FRIEND.

#### AND WHAT HE TALKED ABOUT.

**C**OME to think about it, it was not exactly a visit after all, for he just wrote it in a letter; but he did once pay us a visit that I shall never forget, for he not only talked bees to us, but before he went away he talked a little, and in his letters afterward dropped a word now and then, on the eternal life that is to come. There is and always will be, friend M., a warm place in the hearts of our household, for you or any words from you. Well, here is the letter I was going to talk about, that comes in after the Jan. No., so like a visit:

#### BEES DRINKING AT THEIR HIVES.

You say you never saw bees drinking at their own hives. One evening, last fall, I heard quite a commotion at one of my hives, the same as they make when being fed. It was dusk, and, on looking close, I found a puddle of rain-water on the alighting board, and a row of bees crowded around it, the same as they would crowd around honey. What surprised me most was that it should create the same excitement as a like amount of honey would do.

It is a fact, friend M., that bees will sometimes take greedily great amounts of water. Since our last, I have been filling some thin sponges with water, and placing them with lumps of candy over the frames and, under the chaff. The water was taken entirely every day, and the amount of candy consumed when the sponges were full of water was very greatly augmented. I do not know of any safer way in the world to feed, than to give candy and water in this way. I do not think I would resort to steady feeding, as a general thing, before the first of March. During these mild January days, we have fed until the young bees are hatching out in great numbers, but we do not know how soon zero weather may make mischief, or at least give us good cause to fear it.

#### BEES AND GRAPES.

I am reluctantly obliged to admit that my grape crop suffers from my bees. I have 1½ acres in grapes, and, last fall, the bees were very thick upon them. I should like to say that they only finished up those grapes which had been rendered worthless by the wasps, but scarcely a wasp was to be seen, and bushels of grapes were destroyed. There was no bursting of the grapes with wet weather; it was a very dry time, and each grape, when first attacked, had a small slot or hole 1-16 to 1-8 in. long, very different from the cleft in a bursted grape. Even if the grapes were first punctured by the wasps, the main damage was done by the bees, I think. I have seen a bee entirely hidden in the shell of a grape, having squeezed through a hole hardly large enough to admit it.

Now, friend M., I am not glad to hear that bees do eat grapes, but I am glad to see at least one man stand up, and own up to his conviction that it is a fact. There are more of us who, in private conversation, have admitted that the bees did do the mischief, but