

BEE BOTANY AND ENTOMOLOGY.

I AM one of the A B C class in bee culture, and as such am very much interested in bees and bee plants. I send you herewith three specimens of fall flowers, numbered 1, 2 and 3, which are very common here, and should very much like you to give me the names of the same in next GLEANINGS, and their worth as bee plants.

No. 1 has been in very heavy blossom here for about a month, and is scarcely beginning to fall now. Bees have been very hard at work on it all this time.

No. 2 I suppose is golden rod, although I am not quite positive. If it is, of course GLEANINGS has already told me all about it. Bees very much prefer No. 1 to it, however.

No. 3 is considerably sought after by the bees, and they seem to get a good deal of honey from it, but this is also very much inferior to No. 1.

If you are not overrun with such questions from the ignorant, and can answer as above, you will very much oblige the A B C class of this neighborhood.

N. H. ALLEN.

Kirkwood, Mo., Oct. 7, 1878.

No. 1 is one of the small asters, of which there are a large number of species, all valuable for bees.

No. 2 is one of the largest golden rods, of which there are also a large number of species. They are prominent bee plants. No country on the globe is more renowned than the United States, for the asters and golden rods which abound in autumn.

No. 3 is *Eupatorium altissimum*, one of the tall bonets, of which we have twenty or thirty species, all valuable for honey.

W. J. BEAL.

Mich. Agr. College.

I send you a bush that has been in bloom about a month. It grows about 2 feet high. Bees work on it all day, and it must be honey they get as I don't see anything on their legs. Please give the name of it. I also send the head or blossoms of what is called here golden rod. It commenced blossoming 6 weeks ago; some of the plants have ripe seed, others are just in bloom, and still others are just budding. We have had 5 or 6 frosts, but they do not seem to injure it. Bees are very busy on it. My bees have gathered more honey from it than from all other blossoms. The honey is a clear golden color, nearly the color of the blossom, and weighs 13 lbs. to the gallon. Would it pay to save the seed?

T. B. WILLIAMS.

Fort Scott, Kas., Oct. 8, 1878.

The name of the bush, of which a specimen was sent, is *Amphichrysis dracunculoides*. It has no common name. It is probably much like some of the golden rods and asters for honey. Bee-keepers, unless they are botanists, have but a faint idea of the great number and variety of plants visited by bees.

W. J. BEAL.

Mich. Agr. College.

I cannot say whether it will pay to raise golden rod or no. It furnishes much honey in some localities: in others (like our own), bees notice it little or not at all.

Enclosed, I send you a sample of a weed found here very plentifully, which seems to be quite prolific in honey, for the bees are constantly at work upon it. It is also very prolific in flowers, as I have just taken a small branch, six inches long, and counted 134 flowers upon it. I know of no name for it. What can you say about it?

A. A. FRADENBURG.

North East, Pa., Oct. 7, 1878.

The enclosed plant is *Aster carolinifolius*.

W. J. BEAL.

Mich. Agr. College.

Enclosed find a bunch of bloom, from which the bees appear to be getting plenty of honey for present use. Please tell me the name of the plant.

S. H. LANE.

Whitestown, Ind., Oct. 8, 1878.

The enclosed plant is one of the small asters, of which there are many.

W. J. BEAL.

Mich. Agr. College.

Enclosed, please find specimen of a little blue flower now in bloom here, which the bees are very busy on. It grows among the brush and hedges.

and also on the edge of the ditch. It appears to be on a vine, and has a white bud which blooms into a beautiful, light blue flower.

F. F. FELL.

West Baton Rouge, La., Oct. 17th, '78.

The enclosed flower is *Conoclinium celestinum*, or mist flower. I know nothing of the value of this particular plant for bees. It is nearly related to *Eupatorium* or boneset or thoroughwort. I presume it is good for bees.

W. J. BEAL.

Mich. Agr. College.

Bees are still bringing in honey lively, from clover and a wild flower, of which the enclosed is a specimen. What is the name? CHAS. E. MCRAY.

Canon City, Col., Sept. 23, 1878.

The enclosed flower is a species of *Coreopsis*, of which there are many; all are good bee plants, so far as I know.

W. J. BEAL.

Mich. Agr. College.

CALIFORNIA.

I HAVE shipped my honey, at \$12.50 per ton, in a sailing vessel, from San Francisco via Cape Horn to Liverpool, Eng., and will myself start in about a month, via Omaha and N. Y., to look after the sale of the honey, and learn what I can of the European honey market. Hundreds of tons have been lately shipped from this coast to Liverpool, London, and Hamburg.

Our honey will not average quite as good and thick as usual this year, on account of so much rain and fog during the first half of the season.

I very narrowly escaped having my apiary (worth \$3,000) burned a few days since, by a great fire in the mountains, and among the apiaries of the Sespe.

I suppose, since you have had a picture of a California apiary, you will not want one of my apiary, as you once suggested. I have now 490 hives nearly Simplicity style, painted white, the whole apiary making a nice honey comb, slightly inclined to the east. I have some grapevines growing nicely in it this year, but hesitate to plant many, for fear they will be too much in the road; especially, if we shake the bees in front of the hive in extracting.

My extracting house is in the center of the apiary; the lower half is wood, and the upper half wirecloth, affording the coolest retreat in hot weather, and giving a full view of all the surroundings. A 2-inch tin pipe, painted black so as to heat the honey for straining, conducts the honey from the extractor, for a distance of 125 feet, to the honey house or basement of my shop, at the lower side of the apiary, into a tank holding 3,000 lbs., with measuring faucet to draw off the honey.

The crystal waters of the Sespe flow from north to south among the rocks, just east of the honey house; the mountains rise on the other three sides of my three acre plot, now dotted with elder trees, some of them nearly as thick as a man's body, and looking like a fifteen year old apple tree. They are too big to make popguns of, as we used to do in the East from the largest stocks of them, which grew and bore berries in the fence corners; but I am about digging them up to give place to an orchard of choice fruit trees.

I was fearful that my combs would melt in so warm a cove, but as I use enameled cloth on the hives, when the weather becomes hot I fold the cloth forward two inches from the rear, placing a 2-inch stone on the fold under the lid, thus making a current of air through the hive and between cover and cloth.

Sitting on my three wheeled wagon, with a canopy overhead and tools around me, I work all day, cool and easy.

We think we get along very well with tin rabbets, without metal corners. My bees increased this season from 173 to 400 colonies and produced 45,000 lbs. of honey.

I must have more help next year, and will test how it will do to keep 400 hives with their increase in one place.

You should have J. G. Corey, one of our best informed bee men, of this place, to give his experience this year with foul brood on a large scale, how it was introduced, and what about the purifying acid. He has also just completed a smoker which you may have to conclude surpasses Novice's. I think I will take one to the editor of the B. B. J.

R. WILKIN.

San Buenaventura, Cal., Oct. 6, 1878.