

while one species makes its nest of clay, the honey of this species being very good.

Mr. Guerin found one of these nests with six queens (*Melipona fulvipes*). Bates, no mean observer, brought back from the Amazon 45 species of *Melipona*, mostly new species.

I know some editors of bee papers who gravely discuss the uses of *Trigona* and *Melipona*, and who evidently do not know the meaning of the word "species." I see advertisements in *Gleanings* like this: "For sale—Hybrid bees, \$1 a hive." Now, friends, this is not so. Nobody has hybrid bees in the United States as yet. Wait till we get *Dorsata* or *Indica* here, and there may be a chance to get hybrids.

One of the most painful reflections about the recent death of the great Langstroth is the fact that there is no one to take his place as an author and student in apiculture. I know of editors of bee papers who have never read Reanmur's work, the foundation stone of bee culture. All these things make it difficult to convey to the average bee-keeper just what chances there are of improving practical apiculture by introducing new species (not race-) of bees. The domestic animals of the United States are all introductions; and the introduction of *Apis dorsata* would probably, in my opinion, be of more importance than ostriches or reindeer.

The more we diversify our business, the more likely we are to succeed. The introduction of a new species of bees would give us a standing in the eyes of the world we do not now possess. What I should expect from *Apis dorsata* would be:

1. A larger number of flowers visited having deep nectaries.
2. A larger area covered by its greater power of flight.
3. More wax produced.
4. Honey to come to us now going to bumble bees.
5. A greater power to take care of itself against wasps, etc.

It is, of course, problematical somewhat as to what would be the greatest advantage till we know more about them. Certain it is, they are valuable, and compare favorably with *Mellifica*. I should be discouraged if I did not know how our own honey bee behaves in the tropics. It is often said that *dorsata* is migratory in its habits; but our own honey bee does the same thing pretty much. This is news, but it is a fact. A bee tree is not a bee tree very long in the tropics. When the rainy seasons come, enemies of all sorts come to eat their honey and wax, till in sheer exasperation, evidently, the colony decamp leaving his

abode in the hands of its enemy. Bees in the tropics get no peace.

It may strike your readers as very strange, but flowers are scarce in the tropics. I suppose that Ontario is a better place for flowers than Brazil, under the equator. One of the lies we are taught in childhood is that tropical countries have lots of flowers. Dr. Miller would find wintering quite a problem in the equator—just as much as in Illinois. For months the bees get hardly an ounce of honey. Then they are annoyed by swarms of ants, termites, and moths.

Then *Apis dorsata* is accused of working nights. So does *Mellifica*. Bees in the tropics work nights and mornings only, for the very good reason that the vertical sun evaporates all the nectar out of the tubes in the middle of the day. My own bees used to fly around moonlight nights in the tropics, and no wonder; for a moonlight night in Capricorn is superb; but I could never discover that they did anything nights. On the eastern side of the Andes the little rivulets trickle down the mountain side till about 10 or 11 a.m., then stop altogether for the day. This is about the time bees stop till about 4 p.m., when work is resumed.

Lately *dorsata* was accused of being a great stinger; but among a certain class our own pet has a similar name.

A great amount of data has been collected about the bees of India; and the government of India has published a book about the bees of India that are kept in hives. If we can't do any better we can get the bees the natives have, and try them.

The bees of Bhutan are kept in hives, and are different from ours. It seems to me that, if these natives, with their rudeness, can keep these bees, we ought to do a little better.

The reports furnished to the government of India show that the bees of that country suffer from moths and men chiefly. They do not cultivate our bees—only Europeans do this. Our bees do not mix with theirs.

Bermuda.

[Our correspondent, Mr. Morrison, in his first paragraph, must surely have misunderstood me in what I said concerning *Apis dorsata*, on page 390 and 396. On neither page did I say anything about the "changing the flora" of America. The nearest approach to it was that they would be "out of harmony with the general flora of America." and this was but endorsing the opinion of that scientist and an authority, Mr. Frank R. Cheshire, whom I had just been quoting.]