

and collect very little propolis, even in localities where it is abundant. They are very prolific, more so than Italians, but not equal to Eastern. They incline to store honey in surplus combs, therefore breed during the honey flow, and they are very strong at the close. In temper the Carniolans were the gentlest known. Mr. Benton stated that he was four years in Carniola, and never, during that time, required a veil, often taking out fifty and sixty queens a day. A little smoke alarms and subdues them; but not much should be used. This start saves much smoking, and they can be shaken from the combs more readily. If these bees are cross it is exceedingly exceptional. They lack courage when made queenless, and are easily robbed; otherwise they are courageous. Here was a weakness. He at first thought them inclined to rob. When these bees are left alone one did not notice this, but when kept with the blacks this tendency was manifest. Their wintering qualities excel all other races: especially if wintered outside, they collect compactly and quietly.

In Germany, beekeepers fed in the spring to induce early swarming. The tendency therefore was to develop that characteristic. They were sensitive to heat, therefore shading should be resorted to; surplus room should be given early. By careful selection he thought the tendency to swarm might be rooted out, and on that account he did not think American beekeepers should neglect the race. The grey Carniolan has grand properties. He did not think they would replace the Italian queens.

Dalmatian bees, near the Adriatic, were good honey gatherers and comb builders. They might be tested.

Hymetic bees have been kept there in wooden comb hives for thousands of years. In 1790 a work was written describing their system of cutting out combs and making artificial swarms. The bees were not as gentle as Carniolans.

Cyprian and other races were described. Cyprians were quick to move; they had great honey gathering qualities: they

would often gather when others got no surplus. They capped honey close, therefore they were not good for comb honey. They gathered much propolis; they are very prolific; he thought they could be turned to good account; they were exceedingly courageous; smoke had to be used very lightly; they were sensitive to light. He thought for extracted honey they possessed remarkable qualities if the beekeeper was skilful.

What about Carniolan crosses?

You break up the fixed propensity, and do not know what you get.

He had never recommended any Eastern bees in preference to the Cyprian.

Tunisian bees are from Tripoli (they are the Punic bees, as some have called them). They are the blackest bees, smaller than Italians; they fly quickly, are excellent honey gatherers, good comb builders, and cap fairly well, but not equal to blacks. They were the worst gatherers of propolis, and beat anything Mr. Benton ever saw for comb honey. They must be rejected. Their introduction would be very bad for comb honey producers. They could stand a fair amount of smoke; when once aroused they were just as bad as Cyprians, and one was more liable to accident with them than the Cyprians. He did not think they wintered remarkably well. The bees would bite as well as sting. He would raise his voice against their introduction.

*Apis flora* builds in open air; they had never been introduced west of Cyprus. The combs were very small. They were disposed to migrate. One could hope for nothing from them.

*Apis Indica*, not so large as Italians. Many were five banded and very pretty, as high as thirty pounds of honey had been reported from a hive. He thought they would be worth testing.

*Apis dorsata*, found in India. Were in 1881 first noticed by advanced beekeepers. Their appearance was very different, the workers were the size of ordinary queen bees; their movements were different to our workers; they were good gatherers; their wax was an important article of commerce. The combs were generally