

Do you know me? I am buzz bee

Jyoti Falswal

What are these colorful, beautiful creatures who keep coming on flowers in our garden? Yes, these are bees. Your daily visitors you do not even notice. Whenever we talk about bees, generally only honey bees come to our mind. Why? Wouldn't other bees feel bad? (Fig.1). If I tell you the truth, Indian Halictid bees have been orphaned after Bingham 1897. Or maybe this would be right to say that nobody had interest in them or even knew them. But now the situation is different. Bees are happy to know that few are studying and knowing them.

Before 3 years when I started my research on bees I found a lot of Halictid bee literature from foreign countries but very less from India. Why so, are not we interested or we are playing hide and seek with our bees? But today, i can say that Halictid bees have taken their flight in India. Soon, the world will be seeing our duet with bees.

“Taxonomy” mostly considered as a horrific word by students in science that frightens them because it's very difficult to remember the scientific name of organisms. Everyone thinks that it's not their cup of tea...only those have interest in taxonomy, which has capability of rote learning and have a lot of patience.

Like you, I was one of them and never liked the subject till my post graduation. However, working on little cute Lady Bird beetles during my postgraduate program changed my mind set and I developed interest in taxonomy. And today I don't find any other subject better than taxonomy and I am fond of taxonomy now. Maybe this is the reason my Ph.D. in taxonomy doesn't feel like a headache. Eventually, bees need a pilot in their flight. Do you know in the whole learning process which one could be your favorite part? Sitting quietly in a corner in laboratory, look at the bees under microscope, identifying them and search for new species. Sounds pretty amazing right?

By the way taxonomy is a branch of science in which we identify the living and non-living things based on their features, place them in their family to which they belong and give identity by giving them name by which they would be called tomorrow by everyone. Whenever we find new species, naming them is just like we keep the name of a new born baby at home. Subsequently, we make their complete horoscope, so that after 10 years from today or after 100 years no one forgets them. They become a significant part of the history. Other hand naming them is beneficial for us too like for biodiversity organization and

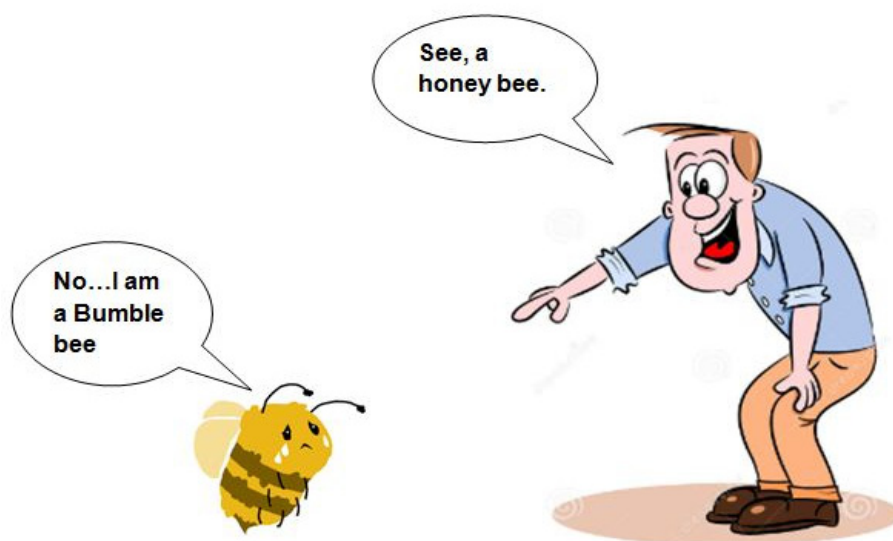


Fig.1. Bombus bee is being misidentified by a common man

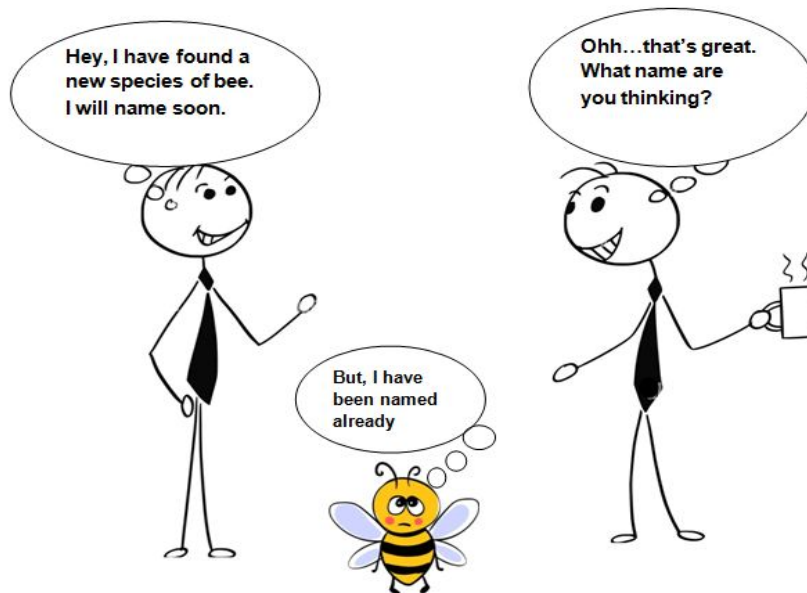


Fig. 2. A bee is upset by being named repeatedly

conservation.

Why is it important to name them? If taxonomists don't take care of, who will remember them tomorrow? How long do the bees live, just a few days? Any organism, any caste will get upset because of different nomenclature again and again (Fig.2). They feel as if they don't have any identity. Here comes taxonomist's role, the taxonomists are *Pandits* in their life who writes down their horoscopes (Fig. 3).

Along with our insecticides issues these bees are also upset as no one knows about them and call them as honey bees. Thus, I thought of taking care of them. When I started working on bees, I developed interest in the Family. Halictidae, which includes bees other than honey bees, is the 2nd largest and most beautiful bee family after Apidae (honey bees) yet with no pride. Simple living creatures, they silently visit the flowers, trade nectar and pollen, and return to their nest with no tension of unemployment, the problem of

tax filing and the election period. But their simplicity does not mean that you are allowed to capture or harm them. They will definitely sting to protect themselves. Well, almost all the bee can sting, whether it's honey bee or other bee (except stingless bees from family Apidae). But here is one surprise for you, you have to be careful with only female bee (though, have to be careful with females anyway) because male bees don't sting. As female bees have a sting on the tip of their abdomen which is inserted into the body of enemies. But by just planting a few flowering plants, we can make them our dear friends.

Their family ladder is also similar to ours, it starts from Phylum followed by Class, Family, Subfamily, Tribe, Genus and finally Species. The genus is like our family name and the species is like an individual name. Another striking similarity is that their family is also governed by parents, just like us, who are present in house and propagating their family. For every



Fig. 3. Bees getting their recognition by a taxonomist

work, they have different individuals, some take care of their food, some cleanliness, some do repair work and some do protect them. There are many more like this...Isn't it interesting? Sometimes people found it fascinating and became fan of these beautiful bees.

The bees of my interest belong to Halictidae family which has almost 4500 species worldwide. Sadly, only 215 species love India or we can say that till date only 215 species are reported from India. I have found almost 37 new locality records of the Halictidae family in India in the last 2 years. I am glad to say that I have recorded 04 species for the first time from India and discover 07 new species from this family.

This research has increased total number to 220 in family Halictidae. You may find the numbers small but the journey of a researcher is full of hurdles. Taxonomists must wander around day and night and travel great distances in order to capture, research, and provide a family name for these bees. To find these shy creatures, they have to visit different agro-ecosystems. Light traps during nighttime inside the forest area or deep vegetations also important for night out loving bees.

The flight is yet to be completed and it is forbidden to be tired. There are many more bees living in our country, but they do not have Indian citizenship. I believe that they should get their due. They should get their family name and their own Aadhar Card. Apart from bees; there are many other creatures which are still unknown. We have to find out about all of them. This research should be continued. The deeper the search, the more golden will be the result. This study can never end because evolution will continue and our work will too continue.

This is my bee's little story which is comprise many short stories in very simple language so that everybody can easily understand. I hope with your blessings I can make my bees fly higher.

AUTHOR

Jyoti Falswal

Acharya Narendra Dev College

University of Delhi

Email: jyotifalswal057@gmail.com
