

nor colour played any part in attracting insects and that they were guided entirely by a sense of smell.

This sense is defined by Forel as "a special sense which allows the animal to recognize at a distance by some specialized energy the (chemical) nature of a certain body." Our scientific knowledge of odours is rather meagre. Some are known vaguely as pleasant or unpleasant and for many we have no definite names whatever, and are forced to liken them to the few odours with which we are familiar and for which we have definite names. Moreover, some smells are exceedingly complex experiences involving elements of taste, touch and vision. The most satisfactory classification of smells is that adapted by Zwaardemaker from the classification of Linnaeus, which groups natural objects according to similarities, but does not aim to itemize all smells. This list is as follows:

- 1.—Ethereal smells, including all fruit odours.
- 2.—Aromatic smells; for example, those of camphor, spices, lemon, rose.
- 3.—Fragrant smells, those of most flowers.
- 4.—Ambrosiac smells—all musk odours.
- 5.—Alliaceous smells—those of garlic, asafœtida, fish, chlorine.
- 6.—Empyreumatic smells—those of tobacco, toast.
- 7.—Hircine smells—those of cheese, rancid fat.
- 8.—Virulent smells—those of opium.
- 9.—Nauseating smells—those of decaying animal matter.

In the Lepidoptera practically all members are attracted by fragrant smells. The Coleoptera have a somewhat wider range. Dermestidæ are attracted by fragrant and also hircine odours; *Dermestes lardarius*, for instance, the larva of which feeds on bacon, cheese, meat and feathers. The bumble flower beetle, *Euphoria inda*, finds ethereal and fragrant odours to its liking, being found feeding on peaches, grapes, apples and the pollen of flowers. Locust borers and soldier beetles are plentiful on goldenrod and various Buprestids also visit flowers, while the cigarette beetle has an empyreumatic taste. The Silphidæ, however, are drawn to nauseating odours, feeding, as they do, on decaying flesh.

With the exception of the ants, nearly all Hymenoptera are attracted by fragrant odours and also ethereal odours, the Vespidæ and bees being very fond of nectar and fruit juices. Ants have a