

but which are now explained by corresponding peculiarities in some other groups. A full history of the enquiries of Bonnet and others was given by Mr. Hardy, in a series of papers published some years ago in the *Scottish Gardener*.

Prof. Huxley's important papers "On the Agamic Reproduction and Morphology of Aphis" will be found in the third part of the 22d volume of the Transactions of the Linnean Society (1858).

The following is a detailed description of the wheat or grain aphid:

**APHIS AVENÆ.**—Plump, pale reddish to brown or apple-green (usually pale-red but very various as regards colour), with blackish legs and feelers, appears late in summer in colonies, on flowering panicles of grasses and cereal grains, becoming winged and leaving the ears, as the season advances and the grain ripens.

*Viviparous Wingless Female.*—Body, medium sized,  $\frac{1}{10}$ th to  $\frac{1}{8}$ th of an inch in length, oval-oblong, convex with a rim on each side, more or less glossy, especially when mature, varying in colour from pale apple-yellow to deep reddish yellow or reddish brown when young, becoming darker when old; often of a deep brick-red or chestnut brown, especially on the dorsal surface of the abdomen and other exposed parts, rarely the whole body is of a dull glaucous green, sparsely covered with scattered hairs. The feelers are black, rather more than half the length of the body, rough throughout with bristly hairs, the two basal joints short and thick, especially the first, the terminal one remarkably long and slender, transversely notched throughout its whole length, the intermediate ones four or five times as long as broad (only six joints are developed). The eyes are dark, the rostrum quarter the length of the body, of a yellowish or tawny hue, the terminal joint black, the nectaries almost black. The legs are tawny, the knees, the feet, and the tips of the shanks black, all rather closely covered with bristly hair.

*Viviparous Winged Female.*—Dark brown, sometimes almost black, feelers longer than the body, hairy, dorsal processes of the abdomen ("nectaries") about a fifth the length of the body; legs dark, the knees, feet, &c., black, hairy; wings ample, colourless, longer than the body. Size of body  $\frac{1}{8}$  inch; of the wings  $\frac{1}{4}$  inch. Mr. Walker has been very successful in distinguishing aphides by the venation of the wings. I therefore give in his words the description of the wing veins:—"Distance between the first and second veins at the base less than half that between them at the