

unchanged during the winter and constructed its cocoon after the 22nd of May."

I am sure our much lamented friend must have overlooked one portion of the paragraph to which he refers, which was written with the express intention of removing such an objection as he urges, should it arise. I there stated that on the 22nd of May I was trying some experiments in crossing gooseberries—fertilizing the flowers of the Houghton seedling with pollen from some of the English varieties. Anyone who has thought for a moment on this subject will see that to ensure success in hybridization, it is necessary to open the flowers before they are ready to burst of themselves and remove the male organs before the pollen is fully matured, so as to prevent natural impregnation; and also to avoid another source of danger, that of the carrying of pollen by insects from other flowers and its deposition on the stigma of the flower on which you wish to operate. It is well known by those who have cultivated the gooseberry that the flowers are open before the leaves are fully expanded, and that the whole process, from the bursting of the buds to the opening of the flowers, is accomplished in a very short time—usually, I think, within five or six days. I believe that all entomologists agree that the eggs of the saw fly are *invariably* laid on the under side of the leaves, and usually attached to the larger veins. On the date before referred to, the 22nd of May, as the flowers were not then open, there would be scarcely a leaf on the bush sufficiently developed to serve the purpose of the female fly as a resting place for her eggs, and yet nine days after this the cocoon was found attached to the paper bag, and quite firm in its texture, as if it might have placed itself there several days before. From 10 to 14 days would probably elapse from the time of depositing the egg to the appearance of the young larva, and two weeks more, at least—perhaps three—would be required to bring it to its full growth. This work of a month or five weeks could not possibly have been crowded into the space of eight days or less, and I think I can scarcely be accused of rashness in forming the conclusion I did, that in this instance the larva *must* have remained unchanged during the winter, probably under the surface of the ground, then crawled up the bush, attaching itself to the paper bag, and there constructing its cocoon some time between the 22nd and 30th of May.

The hemipterous insect Mr. Walsh refers to in the closing paragraph of his paper I have succeeded in rearing. It is not yet determined, but as far as I can learn, is distinct from either of the species referred to by myself or Mr. Walsh; as soon as it is correctly determined I shall give its name publicity.

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