A MALE OF PTERONUS SIMILIS.—The Rev. F. D. MORICE showed a ♂ and ♀ of *Pteronus* (*Lophyrus*) *similis* Hartig, which he had bred—the ♂ on May 14 of this year and the ♀ a month earlier (April 14)—from larvae sent to him alive on Oct. 23, 1924, by Mr. E. E. Green, who had beaten them from Weymouth Pine (*Pinus strobus*) at Camberley.

He said that this was one of two species of sawfly to which he had called attention at a previous meeting of the Society (Nov. 5, 1924) as not previously recorded from Britain, though one of them (*Pteronidea spiraeae* Zadd.) had for many years been more abundant than welcome in British gardens (certainly in Hertfordshire, Surrey, and Hampshire, and probably elsewhere) which contain its special food-plant, the "*Spiraea aruncus*" of florists and of Linné, but now (he believed) called by botanists "*Aruncus aruncus*" or "*Aruncus silvester*"; while the other had occurred from time to time flying among conifers in several very widely separated British localities (Sutherland, Kent, Surrey, and the New Forest). This latter was the species of which he now showed specimens, and the ♂ (so far as he knew) was the first specimen of that sex that had been captured or bred in Britain, though it might perhaps be standing under some other name in collections not yet seen by him.

Immediately after the emergence of the ♀ from the cocoon—which was also exhibited—she was placed in a tumbler covered by a glass "quarter-plate," and provided day by day with bunches of needles from *Pinus strobus*. On these she laid quite a number of eggs at intervals during the time—about 5 days—through which she lived after leaving the cocoon. Most of them, through various causes, came to nothing; but a certain number produced larvae in about a fortnight, and of these 5 became nearly full-grown. One of the 5 then died for some unknown reason, but the other 4 duly spun up—on May 24, May 30, May 31, and June 1 respectively, and are

now in that condition. (The first of the cocoons to be completed was exhibited as well as that of its parent.)

These eggs were, of course, all parthenogenetic, the mother never having seen a ♂. They were laid, generally 5, 6, or more at a time, in a row along one side of a needle and nearly touching each other, but sometimes by twos or threes, or even singly, and immediately covered by a clammy greenish substance probably derived from the laceration of the needle by the saws of the parent, which after a time changed its colour to a brownish yellow, and seemed to harden. If, which did not always happen, the needle on which the eggs were laid remained green and fresh, the eggs gradually increased in size—more rapidly (as it seemed) in *breadth* than in length—and in so doing burst through their brownish covering, which fell away in flakes leaving the eggs more or less completely exposed. If, however, the needle withered and dried up, the eggs presumably perished also: at any rate they grew no more, and the dried secretion remained in place permanently. The colour of the eggs when they became visible was a distinct though very pale blue.

The first larvae appeared on April 28. They were then, of course, very small, and appeared to be entirely dark green with black heads and no pale or yellow markings. They grew very slowly, and many of them died before assuming the characteristic coloration of the adult—namely, a long whitish vitta in the middle of the dorsum, which was bisected longitudinally by a dark blackish line, below this vitta on each side appeared a close succession of parallel transverse whitish yellow streaks, and below this again a series of roundish spots the largest of which were always bright yellow while the smaller ones were sometimes yellow and sometimes whitish. The ground-colour of the body apart from these markings was plumbeous-black, the head and thoracic legs entirely shining black, the ventral and caudal prolegs and the whole thoracic and abdominal ventral surface (between the legs and prolegs) clear white.

The young larvae often fed *in pairs*, one on each side of a needle, so that their ventral sides were almost in actual contact (!). They ate at the same rate, always moving *backwards*

as they did so. Of course, if they had done otherwise, they would have eaten away the part of the needle which supported them and tumbled sooner or later to the ground. Though thus careful of their own safety, they had no consideration for that of their brethren or sisters. Often the first larva that emerged from a batch of 6 or more eggs would begin feeding between the eggs and the base of the needle, causing the latter before long to dry up, and the eggs thus cut off from nutriment to perish without producing larvae. In this case the brown covering remained *in situ*, and the exhibitor had photographed such needles, many weeks after the eggs had perished, which were quite unaltered from their appearance a few days after the oviposition.

Such specimens as survived till they were nearly full-fed, did not (like many sawfly larvae) assume a threatening attitude by throwing up the hind part of the abdomen when shaken or alarmed, but reared up, tossing the head backwards, projecting their thoracic legs forwards like the fists of a pugilist, and holding on to the needle by their ventral and caudal prolegs only. Finally, one after another, they spun up near the leaf-bud in the centre of a bunch of needles. The cocoons were at first quite white and translucent, the movements and colours of the larvae more or less distinctly visible inside it. Afterwards, as they became thickened by the growth of an opaque inner layer, they became pale-brown and singularly resembled both in form and colour the leaf-buds beside which they had been placed.

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