

SOME PLANT-LICE AFFECTING PEAS, CLOVER, AND LETTUCE.*

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Nectarophora pisi, Kalt., and varieties.

The "Green Dolphin" is one of the best-known pests of peas and vetches in Europe, though but little concerning its economy has been recorded by European writers. In this country, *N. pisi*, Kalt., has been noted by Thomas¹, Oestlund², and Williams³, but as their specimens were never compared with any from Europe, and as plant-lice are exceedingly variable and descriptions of them are, therefore, often of but little value even when accurate, the identity of their specimens with the European forms has been somewhat in doubt.

At the beginning of the present outbreak of the pest in the spring of 1899, as specimens of *N. pisi* of both American and European authors were unavailable for comparison, and as most of the European writers described the species as very much smaller than the remarkably large form under consideration, the species was named *Nectarophora destructor* by Prof. W. G. Johnson⁴, and described by him as new⁵. Prof. Johnson gives⁴ Mr. Th. Pergande as authority for the species, stating that he "considers it an undescribed species," and adds, "Inasmuch as Mr. Pergande does not care to describe it, it is my privilege to name the insect."

In Dec., 1899, the attention of the writer was called to a species of *Nectarophora* doing serious injury to lettuce under glass. Careful study failed to reveal but a few minor characteristics by which this species could be separated from *N. destructor*, Johns., the chief difference being its smaller size, but many specimens were as large as small *destructor*. The similarity of this aphid to *destructor* led to a study of the plant-lice infesting lettuce foliage, and also of the variation in size, form and colour of *N. destructor*, taken at different times during 1899 and 1900. The following table gives the average measurements of different series of specimens of *destructor*, those of *N. pisi*, Kalt., as given by various authors, and those of *N. destructor* as described by Prof. Johnson. Numbers 3, 4, 5, 11, 17, 20, 21 and 22 are all unquestionably *N. destructor*, Johns.:

(*From the Entomological Dept. of the Delaware College Agricultural Experiment Station, Newark, Del.)

1 Thomas, 8th Rept. St. Ent., Ill., p. 64 (1879).

2 Oestlund, Bull. No. 4, Geol. and Nat. Hist. Surv., Minn., p. 82 (1887).

3 Williams, Spec. Bull. No. 1, Univ. Nebr., Dept. Ent., pp. 6, 9, 18, 20, 23 (1891).

4 W. G. Johnson, Bull. No. 20, n. s., Div. Ent., U. S. Dept. Ag., pp. 94-9 (1899).

5 W. G. Johnson, CANADIAN ENTOMOLOGIST, XXXII, pp. 55-60 (Feb., 1900).