

The Canadian Entomologist.

VOL. VIII.

LONDON, ONT., APRIL, 1876.

No. 4

THE RELATIONSHIP OF THE EARLY SPRING BLUES.

BY SAMUEL H. SCUDDER, CAMBRIDGE, MASS.

The simple fact which Mr. W. H. Edwards published in this journal last May* has thrown great doubt over the relationship of all the American species of *Cyaniris*. From eggs laid in September, 1874, by *C. Pseudargiolus*, he reared in the following February *C. violacea*. From this fact he is led to conjecture that in W. Virginia, where his experiments were made, *C. neglecta* may prove to be a goneutic form of the same species, reducing the entire series in that district to one. He also infers that further north *C. Lucia* and *C. neglecta* are forms of one species, though how this can be reconciled with the previous conjecture he does not explain.

Against the inference concerning *C. Lucia* and *C. neglecta*, Messrs. Saunders and Lintner reasonably urge† that *C. Lucia* is unknown in well worked districts where *C. neglecta* is abundant. This would at first seem to disprove any such relationship between them; but when it is remembered that *C. Pseudargiolus* exists in abundance in California,‡ in districts well explored by resident collectors, while *C. violacea* (raised by Mr. Edwards from *C. Pseudargiolus*) has not yet been found; then we must conclude either that the *Pseudargiolus* of California is a different species from the *Pseudargiolus* of W. Virginia (whereas specimens from the two countries are wonderfully alike), or else that *C. neglecta* may be genetically preceded by *C. Lucia* in one place and not in another.

In writing to Mr. Edwards I also objected, as he remarks in a note appended to his paper, that in Massachusetts *C. neglecta*, *Lucia* and *violacea* all appear in May; but this statement, as Mr. Edwards surmises, is incorrect, and must have been made from memory. To illustrate the subject

* Vol. vii, pp. 81-2.

† This journal, vii, pp. 82-