

5. *Papilio Oregonia*.

Until recently this species was known only in east Washington and Oregon; but the late W. S. Foster, two years ago, took a fine example at Park City, Utah. Mr. B. Neumoegen has sent me for inspection a male taken somewhere in Utah. And, in 1891, Mr. Bruce found several examples in west Colorado. It is evidently a desert species, ranging from Washington to Arizona. In 1890, I had larvæ sent me from east Washington, believed to be of *Oregonia*. But, as they were found on the plants, the sender could not be certain. I saw all the stages from second to adult larva, and obtained one pupa. Of the last two larval stages, I have drawings made under the supervision of Prof. Riley. The larval markings and colours were unlike any *Papilio* larvæ I have known, and I think the species is certainly *Oregonia*; it can be nothing else, coming from that locality. But, as the pupa died before imago, I could not figure these stages on a plate as *Oregonia*. Now, I hope to obtain eggs and begin from that stage, and so get the set of drawings for publication.

6. *Anthocharis Sara* and *A. Reakirtii*.

On March 31st, 1888, I received eggs and larvæ (hatched on the way) of *Reakirtii*, laid 22nd inst. One larva passed first moult, 2nd April; second moult, 4th; fourth moult, 8th April, and pupated on 13th. This pupa gave a true *Reakirtii* imago the next year, 12th April, 1889.

On June 4th, 1888, forty-three eggs laid by *Sara*, in confinement, were sent me by Mr. A. Koebele, but the plant with them rotted, and not more than two larvæ reached me alive on 11th. Mr. Koebele wrote that *Sara*, of May and June, proceeds from eggs laid by *Reakirtii* in March; but that some pupæ went over the winter to produce *Reakirtii* in the early spring; also that the product of *Sara* was *Reakirtii* of the next spring. The dimorphism is as that of *Papilio Ajax*.

It is very common for pupæ of *Anthocharis* to go over two winters. Mr. Koebele wrote me, in 1888, that he then had pupæ of *Sara* and *Cethura* that formed in 1886, and one of the first named he sent me, labelled May, 1886. This, soon after I got it, gave imago *Reakirtii*. I have a living pupa now of *Genutia* of 1890, the only instance I have known in that species. *A. Ausonoides* passes two years in pupa sometimes. Both *P. Rutulus* and *P. Daunus* sometimes pass two years in pupa.