

If there was no error in getting the eggs, such as overlooking eggs that had been laid on the plant before the female was tied to it, then there could be no question of dimorphism, for the eggs that I received were mailed the day they were laid, so that there was no opportunity for any mixing up of larvæ. As Mr. Bruce is an entomologist of many years' experience, and had, as he assured me, taken the utmost care in these experiments, knowing their importance, the facts showed dimorphism, and of a remarkable sort. There was nothing like it in the North American butterfly fauna.

Mr. Bruce's visits to Glenwood Springs began in 1888, and from the first he had noticed that *Bairdii* and *Oregonia* were always associated, and in about equal numbers. But it was a long time before he discovered the food plant. Some one brought him a green, black-striped caterpillar, taken on *Artemisia dracunculoides*, which looked like an *Asterias* in its last stage. From the pupa produced came a *Bairdii* imago. Then he began to get eggs by confining the females over the *Artemisia*. It seems a strange food for one of the *Asterias* or *Machaon* groups; all the known species, except *P. Indra* (that is to say, all the species whose larvæ are known), feeding on Umbelliferæ, fennel, carrots, and the like. *Artemisia* belongs to the Compositæ. It is true the larvæ of the *Papilio*s I am treating of will eat carrot, parsnip and fennel in confinement, but not willingly, and both Mr. Bruce and myself, also Mrs. Peart, have found the mortality excessive when feeding on those plants. There were large fields of carrots about the Springs, and we inquired of several of the owners if they had ever noticed the green caterpillars, but found no one who had done so. The *Artemisia* grows everywhere in the valley of Grand River and its tributaries, and often covers the ground over large areas. It stands about three feet high: a loose, open-growing plant, with many long stems shooting up from the base, or branching at a small angle from the main stem, and these bear very small leaves. One can look through a large clump of it and a caterpillar of the *Papilio*s could not easily escape observation. The yellow eggs, too, are in strong contrast with the peculiar gray-green of the leaves, and would easily be seen.

Mr. Bruce has never caught the two forms in copulation, though he seemed to miss it more than once by a very little. He had written me that on one occasion he saw an *Oregonia* ♀ pursued by two males same, and also by three males *Bairdii*, rolling through the air like a ball, and so low down that he made effort to catch them all with a throw of his net;