

therefore but lately out of chrysalis. So in *Argynnis Myrina*, where I took a pair in copulation both which had emerged in my boxes the previous night. How speedily the males expire after pairing I cannot say; they certainly do sometimes during the process. In 1872, 25th April, Mr. Mead, here at Coalburgh, took in his net a pair of *Ajax* flying by, and found the male not merely dead, but dry, and evidently it had expired many hours before. As I have said, both Boisduval and Kirby and Spence state that the males die very soon after pairing.

I think from what I have said, it will be evident that *Papilio Ajax*, which from its size and strength would seem as likely to live several months as any butterfly in our fauna, really does live but a few weeks, and probably not more than three or four, unless in case of males which have not paired; even then but a trifle longer.

Take *Lycaena Violaacea*, a dimorphic species of which *Violaacea* is the early form and *Pseudargiolus* the later. During 17 years past I have kept record of the first appearance of this *Lycaena* because it is the earliest butterfly of the year, and the harbinger of spring. The earliest date has been 17th February, and the latest date of first appearance has been 7th April. But except in one year, 1876, the earliest examples seen have been on 6th March. No flowers are in bloom so early, and the Dogwood (*Cornus*), on the flowers of which *Violaacea* deposits its eggs, does not usually begin to put forth its flower buds till about middle of April. The eggs are not formed when the females come from chrysalis, nor till several days have passed. In 1878, 7th April, I dissected a ♀ and found no eggs. The same day the Dogwood was in bud, but I found no eggs after a long search. On 13th April I confined a ♀ over a limb of Dogwood and got 40 eggs. On 16th April, 1880, I took a pair of *Violaacea* in copulation, and 17th found the first eggs of the season, though I had been watching daily for them.

On 26th April, 1881, the buds were still unopened but formed, and I found the first eggs on them. In 1879, 27th April, I found eggs, but no young larvæ. Three days later there were scores of eggs, seven on one flower head, but still no larvæ. On 1st May the larvæ were hatching.

Up to the time of laying eggs fresh males and females are to be taken and I repeatedly record this. The latest mention of *Violaacea* is on 6th May in one year, when two or three were seen.

The next generation, *Pseudargiolus*, come from eggs laid by the early form, *Violaacea*, in these years has been first seen once on 19th April, once