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cases, head and thorax finely rugose; a very slightly elevated médian smooth line over the head and back of the thorax. Tip of the abdominal joint coarsely wrinkled and tipped with 8 hooks, the two outer the longest. Color dark brown covered over with white pruinescence. The cocoon is made, as in the other species, by fastening leaves together, lined a little with silk mostly where the tip of the abdomen comes and into which the hooks are fastened. Duration of this period 41 to 42 days from the time of spinning to yielding the imagines.

The eggs were deposited Aug. 15, 1882, by a single female that had been confined under a screen two or three days, 44 being obtained in all. They began hatching April 3, 1883, began pupating April 30, and the imagines appeared from June 8 to 11. This gives us a period of 297 days as a minimum of time from the egg to the imago, allowing the eggs to be deposited at the time of year these were. As the species occurs through the whole of the Catocala season, it is probable that the eggs are deposited at different times during the summer. I can not say whether they are single brooded or double, but am inclined to the opinion that there is only one brood in a season from the same parentage, and that the continual recurrence of individuals through the season is due to the difference in development of individuals from the same brood of eggs, and perhaps in part to the difference in time of depositing of the eggs. In a brood of eggs of C. Amatrix I found a month's difference between the first and last of hatching, so that I had larvæ in the first stage and mature Only a few of the eggs of this species hatched, larvæ at the same time. and of these only three passed through all their transformations. If a large number of eggs, as for instance all that may be deposited by a single female, in their hatching showed as much difference of time as did the C. Amatrix eggs, this would account for at least a month of the time this species is seen flying. All the species I have reared require about a month for the growth of the larva, and another month for the pupal If the different species are about uniform in this respect, then period. most of the species must be single brooded, for they do not have an average time of flying sufficient to allow of a second brood from the time of the appearance of the first specimens of the season till they cease flying. But the extra heat of summer may accelerate their development as it does other insects, and in that way give us more than one brood of some species, hence with Ilia and a few others the question of the number

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