

EARLY STAGES OF GRAPTA J-ALBUM.

BY SHELBY W. DENTON, WELLESLEY, MASS.

Since the food plant and early stages of *Grapta j-Album* appear to be unknown, perhaps the following notes (incomplete as they are owing to my ignorance of the species larvæ I was rearing) may still be of some value and shed a little light on the early stages of this fine butterfly.

On May 17th of the present year, while passing a clump of white birches I noticed a leaf, on the upper surface and at the extreme end of which clustered a number of small caterpillars. They were dark brown, almost black, in color, covered with black spines and not much, if any, longer than a grain of wheat. Not knowing at the time what species of Lepidoptera they would eventually make, I simply plucked the leaf and took no further trouble to look for others, or the empty egg shells of these which must have been near at hand, as they were apparently out but a short time.

There were fifteen in all, and these were easily reared by keeping in a jelly glass, feeding with leaves of white birch until they grew too large for the glass, when they were transferred to an ordinary rearing cage. During the earlier stages they moved about very little, feeding side by side, but remaining quite motionless in the middle of the day.

Previous to moulting the last time, they became quite dormant, each one selected a leaf, covering the upper surface more or less with silk, thus partly curling the leaf, thereby hiding themselves within, and with head downward, remained in this position till the desired change took place.

In this stage, and in fact all along, no two were alike in color, although there was a general similarity between them. Perhaps they can best be described as greenish underneath, while the whole upper surface was brownish or almost black, with the exception of two yellowish or whitish lines along the back. Between the segments they were pinkish in color, with the spines along the upper surface still black and branching, those along the side having changed to yellowish green. Length at this stage, about $1\frac{1}{2}$ inches and not quite as large around as a lead pencil.

In the last stage, and before pupating, the caterpillar became a translucent green, the white streaks on the back faded or disappeared, the base of the branching spines became light colored and the dark upper surface became less in extent and much paler, not so decided.

On June 7th the first one spun a button and attached itself, and by June 12th all were in a chrysalis state.