

developed that the formation of galls could be observed, and again the galls were those of *Spath. albipes*. Out of the 144 buds marked, galls were found on 68, with about 300 galls. The oak chosen was a small shrub four to five feet high, easy to be examined, and showed no where any other galls.

Out of the collected galls a large number of *Spath. albipes* was raised in the first half of June, and were put in a breeding cabinet with a small oak tree. As no copulation nor oviposition was observed, Dr. Adler decided to try observation in the open air. He succeeded June 3rd in finding several females of *Spath. albipes* in the act of oviposition, and secured six wasps, several leaves, and marked four leaves on which he had observed oviposition with a thread. The lens showed that an egg was deposited. The secured wasps were put on the small oak in the breeding cabinet, and now the wasps were observed ovipositing on two leaves. The next day the wasps were examined, and showed the receptaculum seminis full of spermatozoa. On June 5th and 6th several more wasps in the act of oviposition were observed, and six leaves marked. In the first fortnight no change in the leaves was seen; in the third week the substance of the leaf where the egg was deposited was visibly thickened, the larva had left the egg, and the formation of the gall began. Then the progress was very slow; after four to five weeks, in the beginning of July only a very small hairy disk was seen, and only in the end of July the galls could be recognized with certainty as those of *Neuroterus fumipennis*. On all ten leaves such galls were produced.

I have given here the substance of Dr. Adler's experiments only for one pair of individuals, but in the same manner the memoir contains them for seven pairs; two of these, *Neuroterus laciniusculus* and *Spathes. tricolor*, *Aphilotrix Sieboldii* and *Andricus testaceipes*, are not mentioned by Mr. P. Cameron.

I think every student will be puzzled to find such detailed observations unmentioned in Mr. Cameron's paper, when he asks if a consideration of the biology of the species named affords any reasonable evidence in favor of this rather startling hypothesis (p. 154). The only evidence Mr. Cameron tries to give against it is that, if the species are correlated in the way indicated, we ought to find the two forms equally abundant, and in close proximity to each other. He states that only one of the five pairs quoted by him are found together, the other four are not. This fact, if true, would be certainly of importance; nevertheless, I