

That year more than half of the cocoons received during the winter were dead ; many of the larvae had but half changed, *i. e.*, half was still larva, the other half (generally the lower) had already changed to pupa, and in most cases, with the larval skin still clinging about it, in a few partly split open at the back, thus exhibiting the pupa in part. Some, in fact, thus received were alive in that curious condition until spring ; very few of the living pupae were of the proper size. The collectors had also much trouble in gathering them.

However, while *Gloveri* under such conditions did not thrive well in Utah, *ceanothi* in California made splendid cocoons, and but very few, comparatively, did not produce fine imagoes, while most of the *Gloveri* that did hatch were crippled.

This season, 1880, the weather seemed quite the reverse of 1879 ; the atmosphere was more damp, and cocoons received during this winter from Utah are very much larger, heavier and healthier in appearance than in the former ; in several large lots received but very few were not good, and the collectors in the winter of this season had less trouble in obtaining them and were only prevented from gathering large quantities by the deep snows occurring in Utah this winter.

The change with *ceanothi* was this season again the reverse, as my correspondents write me frosts occurred nearly every morning in those portions of California quite late in the summer, the result being that *ceanothi* was very late and also scarce, and the cocoons very much smaller compared with the previous season, and many of these were no good. Larvae received from Mr. Baron, arrived Sept. 10th, were not half as large as those I had raised here in a moderately tempered but well ventilated brick building.

Certain it is, however, that localities may be found in seasons of general scarcity, in valleys or protected by surrounding hills or woods, where certain species may be found in great abundance and in fine condition.

With many experiments I have tried for three seasons, I am convinced that cocoons of *Gloveri* should be kept in a cool place in winter (freezing will not hurt them), or they will hatch cripples, if alive at all ; while *ceanothi* should be kept in a place neither too warm nor dry, but not too cold, until the spring season is well upon us.

That *Gloveri*, *ceanothi*, *columbia* and others of that family are originally of one form, whether *ccropia* or some other species, I have no doubt ; of course climatic and food changes, for many generations, as is well known