

the winters are of exceptional severity. The consequent weakening of the individuals by this undue exposure may produce a stunted and debilitated race, and the effects of this debility be shown in the lack of the bright yellow pigmentation so characteristic of the forms from the dry, warm regions of the South.

I am far from thinking that all has been written upon the subject of the variation in *Crossidius* that the occasion offers, but space has its limits and the material is too scanty to more than indicate in what direction we may look for the explanation of some of the phenomena presented. The data regarding precipitation in the different localities even cannot entirely be relied upon, as I have had to apply the average taken at Flagstaff to Williams, which is but few miles distant, and at very nearly the same elevation. In the same way it has been necessary to take that given at Prescott as approximately correct for Peach Springs and Seligman. However, I hope the article may attract the attention of more of our American students of entomology to a fascinating branch of the science, and that we may soon see in this country a number of workers who will follow out the lines of investigation suggested by our English brothers, and for the furtherance of which they have established a new magazine† especially devoted to the discussion of variation and its manifold causes. Most of my own work in this article has been suggested by the writings of Mr. Tutt, and to his works I would refer those who care to follow up the subject and learn, in a reasonable compass and without the mass of irrelevant matter which encumbers some other recent works dealing with the speculative side of entomology, what new fields of investigation may be opened up to those who like to know the histories of their insects as well as their names.

EXPLANATION OF PLATE.

- Figs. *a* to *j*, *Crossidius pulchellus*, southern forms.
Fig. *k*, “ *longipennis*, Casey.
Fig. *l*, “ *intermedius*, Ulke.
Figs. *m* and *n*, “ *nitidicollis*, Casey.
Figs. *o* and *p*, “ *discoideus*, Say.
Figs. *q* to *t*, “ *pulchellus*, Lec., northern forms.

†The Entomologist's Record and Journal of Variation.