

research I believe I have had my eyes opened to the influence which outer conditions may directly have on the transformation of the organism; a somewhat secondary part is indeed also played by selection.

We may return now to the question—How are we to consider all these single links in the chains of forms, all these local variations? Do they belong to one and the same species, or may they simply be regarded as “Standortsmodificationen” which, as soon as the individuals are taken back to the localities where they originally lived, return to the original form of the local race from which they sprung? In other words, are they comparable with the form series of Celebes snails described by the brothers Sarassin, or have we to do with chains of forms of geographically separated species fixed by inheritance, corresponding to those demonstrated by Wettstein in *Euphrasia* (1896) and *Gentiana* (1896, p. 307; 1900, p. 305), and after him by Sterneck in *Alectorolophus* (1901, p. 1)?

On this matter we can at present form no definite judgment. It is for the rest obvious that researches on the formation of species in plankton organisms, as they penetrate more deeply into diverse domains, will yield quite different results. What is wanted here is experiment: until we have such before us each one may retain his own subjective opinion.

As for me, I believe that a great part of the local variations are to be regarded as in fact constant forms (*petits espèces* of the botanist), which may, however, be connected with forms not constant, but which under other conditions either return to or develop into one another. I therefore bring all the forms under single large collective species: *D. longispina*, *B. coregoni*, etc. If it should be objected that this standpoint is not quite consistent, I would answer that it is the nearest approach to nature, where all is in a fluctuating condition, in constant process of development. The sharp boundaries are man's work: any greater precision in description than the subject permits oversteps the aim, and should, in my opinion, be avoided. This investigation has therefore tended more to delete the boundaries between forms than to make them more fixed.

*Summary.*—We have now endeavoured to give a brief review of the investigations of recent years on the variation of plankton organisms. That this variation is advantageous for the plankton organisms, and one of the means by which the cosmopolitanism of the fresh-water community is rendered possible, is in my opinion very probable.

Owing to their form-changing power, the organisms are able to adapt themselves to the variations in the rate of sinking, and conse-