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2-25-1921

## Variation in Taraxacum

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VARIATION IN TARAXACUM

TO THE EDITOR OF SCIENCE: Since several species of *Taraxacum* are parthenogenetic and at the same time highly variable they have looked like tempting material for the study of certain phases of genetics. Moreover their "polymorphy," as well as that of other parthenogenetic plants, has served as a partial basis for well-known attempts to explain parthenogenesis as due to hybridization.

As a matter of fact the degree of leaf dissection is correlated with the age of a given rosette. The typical seedling leaf in both of our common species (*T. vulgare*, gray-fruited, and *T. lævigatum*, red-fruited) tends to be entire and smooth, with the plant producing more dissected, and often more hairy, leaves as it grows older. This would have been obvious to students of the genus but for the confusing fact that smooth, entire leaves are often found on very old roots. If such cases are examined, however, it will be found that the apparently juvenile leaves are borne on multicipital branches of tender age. \*

It is of course well known that the vigorous production of blossoms after the second year causes a radial splitting of the root crown in seedling plants and the production of several daughter rosettes upon the parent root. This cleavage may extend through the length of the root and produce a number of distinct individuals, but in any case the daughter rosettes repeat the history of the parent seedling rosette, so far as leaf characteristics and blooming habits are concerned. If the newly split crown has been buried, the daughter rosettes will be produced at the end of typical rhizomes, often as much as six inches in length. Subsequent pressure renders these rhizomes quite root-like.

The above considerations clarify the interesting results of a culture experiment reported by Stork<sup>1</sup>. It is, moreover, not unprofitable from the standpoint of taxonomy to inspect the average herbarium collection of *Taraxaca* while bearing in mind the correlations just pointed out.

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