

Proceedings of the Iowa Academy of Science

Volume 33 | Annual Issue

Article 15

1926

The Taxonomic Value of Style Color in the Genus *Antennaria*

Helen Nicholson
State University of Iowa

Let us know how access to this document benefits you

Copyright ©1926 Iowa Academy of Science, Inc.

Follow this and additional works at: <https://scholarworks.uni.edu/pias>

Recommended Citation

Nicholson, Helen (1926) "The Taxonomic Value of Style Color in the Genus *Antennaria*," *Proceedings of the Iowa Academy of Science*, 33(1), 129-130.

Available at: <https://scholarworks.uni.edu/pias/vol33/iss1/15>

This Research is brought to you for free and open access by the Iowa Academy of Science at UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

THE TAXONOMIC VALUE OF STYLE COLOR IN THE GENUS *ANTENNARIA*

HELEN NICHOLSON

In the genus *Antennaria*, commonly known as Indian Tobacco, the color of the style arms (usually red or white) is used as a distinctive character in the descriptions of many species, and is emphasized in at least one key. My study of the genus as it occurs in Iowa convinces me that this character is too variable to have any diagnostic value.

According to descriptions of the broad-leaved species, the style arms of *Antennaria plantaginifolia* and *A. occidentalis* are crimson; those of *A. Parlinii*, as described by Fernald, are pale, becoming crimson at maturity; and those of *A. fallax* are pale, sometimes crimson. The same indefiniteness appears in the descriptions of narrow-leaved forms of the genus.

Observation shows that the color of style arms varies greatly in both the small-leaved and the broad-leaved groups of species. In large beds of the narrow-leaved species, *A. neglecta*, on the strip of alluvial prairie south of Amana, and in smaller beds at Butler's Landing and other localities north of Iowa City, I have found red styles and white styles in distinctly separated mats of plants. In the same localities, however, I have found other mats of plants in which both red and white styles were present, not only in flowers of the same plant and on the same stem, but in the same head of flowers. In some heads there were a few flowers with yellow style arms, associated with either red or white styles, or with both, making three colors in a single head. Apparently no heads bore yellow styles only. The same conditions prevailed in patches of the large-leaved forms, *Antennaria plantaginifolia* and its near relatives, at Butler's Landing. There were a few patches of plants with unmixed red or white style arms, just as in the narrow-leaved forms. And in nearby mats, one, two, or in some cases all three colors were found in the same head of flowers.

Considering this variability within a single head of flowers, and in a mat of connected plants, it is impossible to give any value to the color of style arms as a distinctive specific character in the genus *Antennaria*. The other characters used to distinguish be-

tween species of this genus are a little less variable, but nearly all seem to vary as much within a single species as they do between closely related species. No single character of a plant, but a composite of all its characters, must be considered in its identification, and even then it is often difficult to determine to which of the many described species it belongs.

STATE UNIVERSITY OF IOWA,
IOWA CITY, IOWA.