

VIOLETS OF SOUTHERN CALIFORNIA

VESTA MARIE NEWSOM*

INTRODUCTION

Brainerd's recent revision of North American Violets (Vt. Agric. Exp. Sta. Bull. 224:1—172. 1921) presents a very workable treatment and would make such papers as this one quite unnecessary, were it not that so little mention is made of the occurrence of any species of *Viola* in our region.

In the preparation of this paper, assistance has been given by several, to whom I hereby acknowledge my indebtedness: Dr. Philip A. Munz, of Pomona College, under whose direction this study was made, and Dr. N. L. Gardner and Mr. S. B. Parish, of the University of California, and Dr. Ezra Brainerd, for supplying material and information.

All but one of the species have been studied in the field and careful notes made of color and habit. Material has also been available from the following herbaria, for which the abbreviations indicated below are used in citing specimens:

Herbarium of the University of California (C), and
Baker Herbarium of Pomona College (B).

KEY TO THE SOUTHERN CALIFORNIA SPECIES OF VIOLA†

Plant acaulescent or without manifest stems; flowers with a short saccate spur; cleistogamous flowers present.

Petals violet-purple; rootstock thickened, without stolons.....1. *V. nephrophylla* Greene.

Petals white, with dark purple lines present on the 3 lower ones; rootstock slender, with stolons.....2. *V. Macloskeyi* Lloyd.

Plant caulescent, or with manifest stems; spurs on flowers various; no cleistogamous flowers present, with exception of *V. adunca*.

Leaves cut or lobed.

Leaves bipinnately dissected; lateral petals bearded.....6. *V. chrysantha* Hooker.

Leaves palmately parted or divided; bearding various.

Lateral petals bearded; leaves palmately 3-5 parted, with parts 2-5 lobed or only dentate.....8. *V. lobata* Benth.

Lateral petals not bearded; leaves palmately trisected, with segments 2-5 parted and each part irregularly 2-5 lobed or cleft.....7. *V. Sheltonii* Torr.

Leaves not cut or lobed, but entire, with margin entire to serrate-dentate.

*Contribution of Department of Botany, Pomona College, Claremont, Calif.
†In addition to species herein given, *V. arvensis* DC. has been reported as escaped at Seven Oaks by Davidson & Moxley (Fl. So. Cal. 238, 1923).