

TABLE I.—Large-flowered *O. corniculata*, var. *stricta*.

Length of Stamens.		Stamens.	Pistil.	Corolla.
From one plant.	3 mm.	4 mm.	7 mm.	10 mm.
	3	4	7	10
	3	5	7	9
	3	4	6	9
	3	5	6	9
	3	4	5	6
From one plant.	2	3	5	8
	3	4	7	8
	3	5	8	9
	3	5	6	8
	3	4	5	6
	3	4	5	8
Average.		3 mm.	4 3/4 mm.	6.2 mm.

TABLE II. *O. corniculata*, var. (?) *macrantha*.

A. Long-styled.			
Locality.	Length of stamens.	Stamens.	Pistil.
Florida.	4 mm.	5 mm.	7 mm.
"	5	6	6.5
New York.	4	5	7
California.	4	5.5	6
B. Mid-styled.			
	Stamens.	Pistil.	Stamens.
New York.	4 mm.	5 mm.	6 mm.
California.	5	7	9
"	6	7	8
"	4.5	5.5	6
C. Short-styled.			
	Pistil.	Stamens.	Stamens.
Florida.	5 mm.	6 mm.	7 mm.
D. Doubtful.			
	Stamens.	Stamens.	Pistil.
Florida.	5 mm.	6 mm.	6 mm.
"	5	6	6

and pistils (Table II), but have not had an opportunity to measure the pollen of the different sets of stamens. Some of the specimens come very near *O. pilosa*, Nutt., as represented by a flowerless specimen of Nuttall in the Torrey herbarium. It will be seen that the last two (and others have been observed) have the styles equal to the longer stamens, as in typical *corniculata*, although the flowers are very much larger. Botanists who are able to study this large-flowered form in the field should make the measurements on a large number of specimens, necessary to determine whether it is heterogone or not.

While the heterogony of this form is at best only presumable, we have two truly trimorphic species of this section, as may be seen from Tables III-VI.

As these species are all very closely related, they appear to illustrate the manner in which an originally homogone species, variable in the relative length of stamens and pistils in some of its forms, may give rise to others which are trimorphic.

The specimens of *O. acelosella* and its variety *Oregana*, and of *O. trilliifolia*, that I have examined, agree in having the two sets of stamens very unequal in length, while the pistils mostly considerably surpass the longer set¹. The appearance is, therefore,

¹ Cf. Darwin: Different Forms of Flowers, 182; and

Hildebrand: Monatsber. Berl. Akad., 1866, 366; Bot. Zeit., 1887, 36.

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