

Crossosoma bigelovii Wats.

ACTIVITY DATA: Plant Part Weight Locality Coll. & No. Date Priority Voucher

Orig. Sample

Recollections

ACTIVITY DATA:	Plant Part	Weight	Locality	Coll. & No.	Date	Priority	Voucher
PR-25357	st-lf-fl	.75	California	SPJ-2186	3/72		+
25376	st-lf-fl-fr	50.0	"	SPJ-2296	"		+

DISTRIBUTION CALIFORNIA, ARIZONA, MEXICO. Scattered localities: Ord and Sheephole Mts., Whitewater and Morongo Basin, California; Arizona to the margins of the Sonoran Desert and in Mexico south to Magdalena, Sonora, and Calmalli, Baja California. Also reported from Death Valley National Monument (Black Mts.).

HABIT AND ECOLOGY Straggling shrub with rigid stems; main branches from one to two meters high and lateral branches from one to ten cm. long. Leaves solitary on young growth but fascicled on older growth. Flowers white to rose and fragrant. Flowers from February to May. Wind-sheltered rocky canyons, washes and hillsides; Mojave and Sonoran Deserts (Colorado and Arizona Deserts) up to 5000 ft. in elevation.

COMMENTS AND OBSERVATIONS Three species and one variety have been described in the genus Crossosoma. Crossosoma californicum is fairly distinct and found only on the islands off the southern California coast. Crossosoma parviflorum is defined by its fruits being smaller (6-9 mm. long, abruptly short beaked) than C. bigelovii (9 mm., usually conspicuously beaked). C. bigelovii var. glaucum is distinguished by having broader and more glabrous follicles but integration between the two varieties is not complete. The latter is mostly recognized along the eastern margins of the Sonoran Desert. Collecting in the habitat of C. bigelovii would be difficult. In California, C. Bigelovii can be found in quantity along the San Jacinto Mts. near Palm Springs. A collection obtained from Morongo Basin was reported to me to be active in KB. Dr. Cole's assistant also mentioned that collections of this species from Arizona were inactive.

COMMON NAMES AND USES "Bigelow Crossosoma, Bigelow Ragged Rockflower.

REFERENCES Abrams (1), Jaeger (12), Kearney (13), Munz (22), Shreve (28), Standley (30).

Crossosoma parviflorum Robins. & Fern.

ACTIVITY DATA:	Plant Part	Weight	Locality	Coll. & No.	Date	Priority	Voucher
Orig. Sample	St-lf-fl or fr	2.0	ARIZONA	-----	3/26/67	M	---
Recollections	st-lf-fl-fr	53.0	"	SPJ-3307	4/73		+

DISTRIBUTION ARIZONA. From Kearney & Pebbles " Known certainly only from the type specimen collected in the Grand Canyon (Gray in 1885), with fruit only, but collections in Mohave County at Quartermaster Canyon, Lake Mead at 5000 ft. (Nichol in 1939) and in the Black Mts., between Kingman and Oatman (Eastwood, 18420), seem also to belong here. The material is insufficient to permit a conclusion as to whether C. parviflorum is specifically distinct from C. bigelovii".

HABIT AND ECOLOGY

Based on collection made in 1973 in the Black Mts. (cf. to SPJ-3307): Similar to C. bigelovii. Often seen as an intricately branched shrub (appeared as heavily browsed), less than one-half meter high; or those shrubs high on rock walls: branched mostly at the base, stems few with small or short branches as in C. bigelovii, ascending to one and one-half meters high. Restricted to rock pavements and walls of pillars and domes.

COMMENTS AND OBSERVATIONS

I have reviewed herbarium specimens of Crossosoma at the University of Arizona in Tucson. The morphological variation in C. bigelovii leaves one with the impression that C. parviflorum is not worthy of recognition on the basis of those specimens from the areas described above. Either there are many species or just one highly variable species. One may have to devote a great deal of time to survey the original site for 300 pounds of plant material but from what I observed there (between Kingman and Oatman) we are not likely to find more than 100 pounds. Since the Grand Canyon is a National Monument, Lake Mead would appear to be the only other practical site but I have not seen any reference to abundance for Crossosoma here. This species like C. bigelovii grows in places where collecting would be difficult and time-consuming.

COMMON NAMES AND USES ? (See C. bigelovii)

REFERENCES Kearney (13), Standley (30).