

Plant of *Grusonia wrightiana* at the type locality.

Grusonia wrightiana sp. nov.

GRUSONIA WRIGHTIANA sp. nov.

Plantae caespiticiae erectae vel procumbentes 5-10 dm. latae ad 6 dm. altas; articulis ad vel prope bases ramorum ramosis 3-4 cm. diametro 1-3 dm. longis adcretis ad duos annos; ramis procumbentibus subter radicatis; tuberculis circiter 6-8 mm. latis 25 mm. longis frequenter confluis nunc ramis costatis; areolis in apicibus tuberculorum spiniferis; spinis variabilibus subulatis rigidis scabrosis 12-30 mm. longis in transsectionibus plano-compressis, juvenilibus rubellis senilibus albis, vaginis nullis, spina centrali generaliter una 20-30 mm. longa, 1.5-2 mm. lata spinis subcentralibus 5-6 circiter 16-28 mm. longis 1-2 mm. latis lateralibus circiter 14 quam subcentralibus angustioribus; floribus in apicibus ramorum flavis petalis paucis; ovario circiter 10-12 mm. lato 25 mm. longo tuberculato, spinis parvis et glochidiis in areolis; fructibus maturis ignotis.

Plants less than two feet high, spreading two and three feet, growing in colonies in general circular outline. Joints are less than one foot long, seldom growing past the second year and with a constriction rather than a node marking the year's growth; diameter about one and one-half inch; branches grow from base or lower part of joint, either upright or procumbent; procumbent joints root on under side to increase spread of the plant. Tubercles are high, one-quarter inch wide by one inch long, often confluent to form ribs the length of the stems; bearing areoles at the upper end of the tubercle

or its corresponding position when ribbed. Areoles are filled with spines, seldom bearing any glochids; spines vary, generally one central with six subcentrals and fourteen radial spines; weak spines or strong bristles below the radial spines. Spines are flattened, dagger-like, straight; reddish when young, soon becoming white; very rough throughout, without sheaths. Flowers are born at the tip of the joint; are yellow with few petals. Fruit is not known in mature state. Ovary is tuberculate, areoles bearing small weak spines and glochids; about one inch long by one-half inch in diameter.

This new species has been growing in gardens as a clavate *Opuntia* under various names, the principal one used being "*Opuntia emoryi*." I have had the following specimens: One from G. A. Frick collected about 15 miles below the Mexican border in Sonora; one from Clay Peterson of the Springdale Nursery collected near Papago Well southwest of Ajo, Arizona; one from F. W. Lueders of Compton, California, collected in Arizona south of Yuma; the type from Allan B. Clayton of the English Village

GRUSONIA WRIGHTIANA

Studio, El Centro, California, collected in a petrified forest four miles west from the Yuma-Quartzsite Road, 33 miles north of Yuma. It is very close to the Colorado River and is to be found across the river in California. It grows in rather pulverized fine sandy soil in cups surrounded by coarse soil adjacent to washes. Sahuaros (*Carnegiea gigantea*) Ironwood, Mesquite, and Palo Verde trees and little other cactus or brush are its living companions.

A specimen is in the Dudley Herbarium collected by Professor Ira Wiggins "7 miles west of Papago Well, on flat open plain, growing on a low mound about ten meters in diameter and about a half meter high; soil slightly alkaline, very fine and silt-like; western Pima County, Arizona, March 20, 1933."

The species is named in honor of Mrs. John D. (Ysabel) Wright of Montecito and New York, whose collection of cactus is one of the finest in the world, and who has spared no effort to secure and classify every possible species of the *Cactaceae*. It was first mentioned in the Journal of the Cactus and Succulent Society of

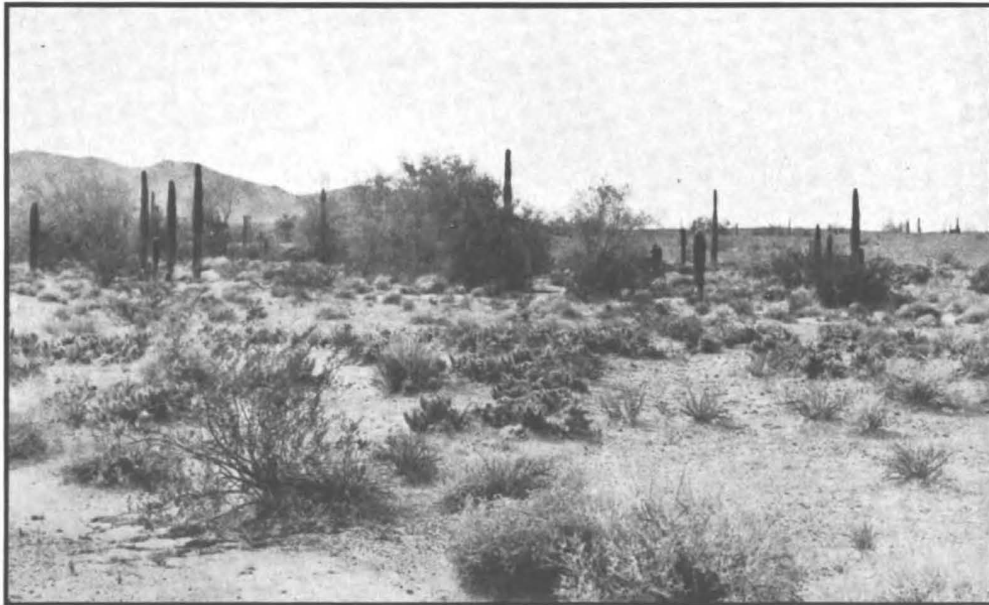
America for November, 1932, Volume IV. No. 5. in an article on the genus *Grusonia*.

Grusonia wrightiana does not resemble in any way any of the clavate *Opuntias*. It is much larger than any of them, grows a second year from the tip of the joints, has an entirely different fruit, and is more cylindrical than clavate. It could not be confused with *Opuntia stanlyi*, to which it is sometimes referred, if both plants are known.

I must acknowledge full credit to Mr. Clayton for searching for the plant, for the photographs of it, for full information on its location, habitat, and for specimens, one of which is the type. TYPE SPECIMEN: Three joints, one with fruit, collected by Allan B. Clayton, April 15, 1934, and deposited in the Dudley Herbarium of Stanford University.

TYPE LOCALITY: Petrified forest near the Colorado River, four miles west of the Quartzsite-Yuma road, 33 miles north of Yuma, Arizona.

DISTRIBUTION: Southwestern Arizona, northwestern Sonora, adjacent California, in scattered colonies.



Landscape showing habitat of *Grusonia wrightiana*. In the background are specimens of the Giant Cactus, *Carnegiea gigantea*. The new *Grusonia* is shown through the center of the picture.