

# *Opuntia aurea*—A New Species

By E. M. BAXTER



*Opuntia aurea*. Notice the flower between the two right extensions of joints. Photo by McCabe

## OPUNTIA AUREA n. sp.

Planta prostrata extente basi ramosa 15-30 cm. alta. Articuli ovati vel late obovati 12 cm. lati et longi, 2.75 cm. crassi pallido-viridi papilloso, non glauci. Folia minuta decidua. Areolae 1-2 mm. diametro plenae glotidiarum bruneo-flavarum 4-5 mm. longarum. Spinae flavae solitariae vel nullae. Flores magni flavi vel rubelluli. Fructus anguste obovatus truncatus carnosus, circa, 3.5 cm. longus apicem 1.5 cm. latus glabrus; areolis 1-2 mm. diametro, 5-7 mm. remotis lanatis plenis glotidiarum pallido-flavarum. Semina flavi 7-8 mm. diametro; lateribus leviter reticulatis et punctis.

Plants prostrate, stems branching from about middle of side edge of next older joint forming a chain of joints seldom two joints high, and forming a plant of rambling growth as these chains strike off in various directions.

Joints are oval to broadly obovate, as large as  $4\frac{1}{2}$  inches (12 cm.) wide and equally long, relatively thick—1 inch (2.75 cm.); light green in color, neither young nor old joints are glaucous; finely papillose.

Areoles are  $\frac{1}{2}$  to  $\frac{3}{4}$  inch (1.5 cm.) apart, only slightly sunken,  $\frac{1}{16}$  inch (1 to 2 mm.) in diameter except on old joints and that part of younger

joints touching or under ground; glochids are prominent,  $\frac{3}{16}$  inch (5 mm.) long, golden brown, occasionally worn away by the weather and at other times (on older joints) a second growth twice as long comes from the center of the areole; a few solitary yellow-clear spines may be expected on some joints although none are reported on wild specimens; leaves are minute.

Flowers are yellow or apricot pink, large, opening widely.

Fruit narrowly obovate, truncate, apparently fleshy, about 3.5 cm. long, 1.5 cm. wide at the apex, glabrous, with oval areoles 1-2 mm. in diameter 5-7 mm. apart; areoles bearing yellowish white wool, light yellowish glochids and occasionally a spine 4-5 mm. long in those areoles near the apex of the fruit.

Seeds nearly circular, about 7-8 mm. in diameter (including the aril), lateral faces minutely faveolate-reticulate and sparsely pitted, the pits about 0.5 mm. or less in diameter; aril 1-2 mm. wide, wavy, light buff.

*Type Locality:*  $\frac{1}{2}$  mile north of Pipe Springs on the Kaibab Indian Reservation, Arizona.

*Type Specimen:* Two joints collected in 1930 by Percy and Helen McCabe at the type locality and placed in the Dudley Herbarium at Stanford University, California as No. 213750, October, 1933.

*Distribution:* Both sides of the Arizona-Utah line near the Kaibab Indian Reservation, and in an undefined area to the west of the Reservation. Specimens are reported from Cane Beds, Pipe Springs, "between Zion Park and Mt. Carmel, and south on the road to Kanab."

A new species, introduced first by the McCabe Gardens of San Diego, and later by Howard Gates of Anaheim, is here described for the first time. It has appeared in the McCabe catalog both under the name shown and as *Opuntia basilaris aurea*, and has been sold by Mr. Gates as "yellow-flowered basilaris". The McCabe name is taken as the specific name for the species, denoting the gold color of the flower.

Its distribution in Northwestern Arizona and Southwestern Utah is very much out of the way of other members of the *Basilares Series* of *Opuntia* and is also the home of the unusual species, *Utahia sileri*, and of *Sclerocactus whipplei* and an unidentified *Coryphantha*. The growth of plants in a chain of joints is similar to that of *Opuntia pyканtha*, also of this series. In fact, *Opuntia aurea* more resembles this last species than it does *Opuntia basilaris*.

Plants are hardy, coming as they do from a high altitude in the northernmost distribution

of the Series' species. In cultivation flowers are born rather seldom, and the plants develop an occasional spine from the upper edge of joints.

Mr. Gates reports about a 50-50 division of color of flowers observed between yellow and an apricot pink. He also says "This yellow flower was larger and differently formed than the yellow *basilaris* I picked up between Zion Park and Mt. Carmel and also south on the road to Kanab. This second one had smaller joints and I believe a different shade of yellow in the flower. I did not notice the short spines mentioned."

The species is a member of the *Basilares Series* and should be placed between *Opuntia*

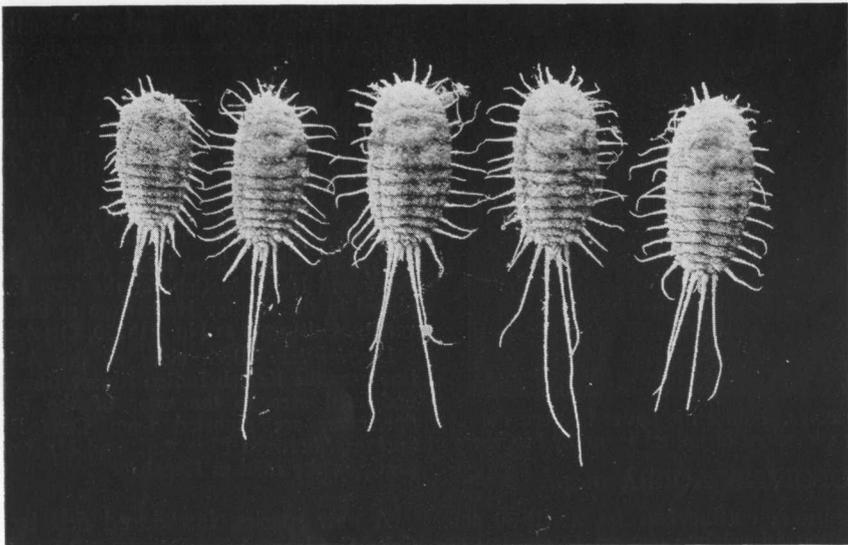
*basilaris* and the following related species: *Opuntia microdasys*, *Opuntia pycnantha*, etc., etc. Its distribution, growth, and flower color separate very definitely from *Opuntia basilaris*, in any of its various forms.

I am indebted to the following for material and assistance given:

Percy and Helen McCabe for the type specimen, and complete data.

Howard Gates for a specimen and much information on distribution.

Professor Ira Wiggins of the Dudley Herbarium for a search of records to qualify the use of the specific name; for the Latin translation of the description and other help.



*Pseudococcus longispinus*

Courtesy of G. R. Gorton

## Control of Mealy Bug

By G. A. FRICK

Ever since I have grown cacti and succulents, I have been interested in the control of mealybugs and have tried a number of remedies and methods with the hopes of getting rid of them.

Today I am of the opinion that this is almost impossible; one can only hope to reduce their numbers so that he can continue to grow his favorite plants with a minimum of interference from this pest.

The application of several different kinds of sprays has not produced very satisfactory results. On page 169, Volume I, of the CACTUS JOUR-

NAL, Col. Perrie Kewen recommended spraying with wood alcohol. This unquestionably is good advice for killing mealybugs, but it goes too far; it also kills your plants, and this same result was found with that splendid insecticide "Volck," which is very good for citrus trees but often death to cacti and succulents.

Entomologists, of whom inquiries were made, all inform me that the mealybug is difficult to kill by fumigation and is not very well controlled by spraying, on account of their rapid multiplication after the spraying has been done,