

often never seems to survive more than five or six years. As Frank says, it is often the corky bottom that stops new roots from pushing through, and the old roots seem to lose the power of producing new feeding roots. It is worthwhile to cut the plant above the corky base and restrike as a cutting, thus giving it a new life. Marion: *Mam. ingens* is a real acquisition. I am only just raising it from seed. It is the largest of all Mams, hence its name". Frank wrote in his letter, "Marion was amazed to hear of your purchase at Woolworth's, but not in the least surprised. I once bought 2 plants from our local branch, and was amazed to see the assistant remove the labels before wrapping the plants up. I asked her if this was usual, and she said, "Yes, we have to keep them for the next lot of plants that come in", which probably accounts for the fact that *Huernia hystrix* was labeled *Opuntia microdasys*! *M. microcarpa* is one of the 'water-shy' species in this country, unless you can give it fairly warm conditions, in which it benefits I do find that many of the 'difficult' species thrive at from an occasional fine spray on sunny days in winter. 55°F min. whereas they are liable to rot off suddenly

if kept cooler. It may be that many of them do not like a completely dry resting period for too long, as they tend to shrivel. I find this applies to most of the hooked spined Baja species . . . So far as I know little research has been done on the life span of cacti, but I am quite sure that some are fairly short lived. A lot of the trouble is that the roots and lower parts of the plant get too woody, and the plant finds it harder and harder to produce new root growth. I have often found that peeling all the corky skin from old plants works wonders, and a fine crop of new roots from the body of the plant occurs".

I hope you all enjoyed reading the letters of these Robins and will find them a spur to write to me to join one if you do not already belong. I shall be happy to place you. As a member of our C. & S. Society it is a privilege you may have as long as you are a member and wish to remain in a Robin. Do write me, won't you?

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Opuntia oricola, a New Pacific Coast Species¹

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An investigation of the flat-jointed opuntias of coastal Southern and Baja California has revealed that a large and conspicuous plant, which occurs frequently throughout a 250 mile length of this well-studied coastal area, has never been formally described. In spite of instances of prolific naming within the Cactaceae, such taxonomic oversights are not uncommon within this family as the spiny and succulent structure of these plants and their complex patterns of variation seem to have caused many botanists to avoid them.

Opuntia oricola sp. nov. Planta ascendens rectave plerumque 1-3 m. alta; articuli exoleti trunco excepto elliptici vel circulares 15-25 cm. longi 12-19 cm. lati, spinis recentibus luteis plerumque translucidis; petala lutea angusta eis interioribus 1.8-2.8 × longioribus quam latioribus; sepala margine implane denticulata; stylus plerumque ruber basi bulbosus expansus, stigmatibus 0.5-1.5 × altiore quam latiore, stigmatibus lobis apiculis carentibus; glochidia capillaria, eis gemmarum floralium plerumque ad 12-21 mm. longis; fructus subglobosus, umbilico profunde impresso.

Plant ascending to erect, usually 1-3 m. high; fully expanded mature stem-joints, other than those which form a trunk, elliptic to circular, 15-25 cm. long, 12-19 cm. wide; unweathered

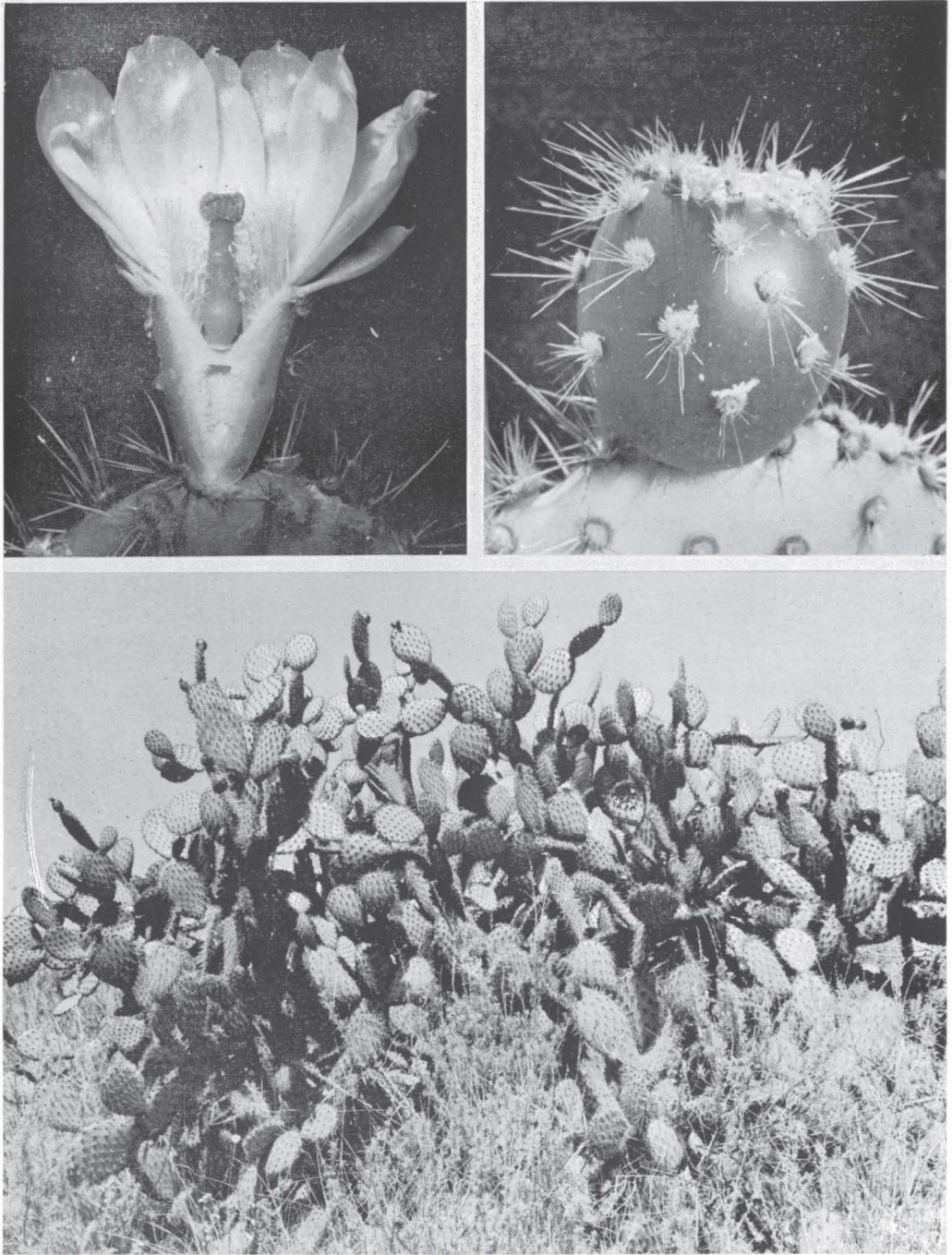
spines yellow, predominantly translucent; petals yellow, narrow, those of the innermost series 1.8-2.8 times as long as broad; sepal margins irregularly denticulate; style usually red with bulbous expansion at base; stigma 0.5-1.5 times as high as wide, stigma lobes without apiculate projections; glochids capillary, the longest on the flower buds usually 12-21 mm.; fruit sub-spherical with deeply depressed umbilicus.

Type. San Ysidro Canyon, one mile northeast of Montecito, Santa Barbara County, California, U.S.A., 4 July 1964, R. N. Philbrick 0443 (SBBG; isotypes, BH, POM).

Known distribution. Coastal area from Santa Barbara, California, U.S.A., south to Ensenada, Baja California, Mexico, and including the California Channel Islands from San Miguel, Santa Barbara County, to Los Coronados, Baja California. Usually within coastal sage vegetation, in disturbed habitats on south-facing slopes at elevations below 500 feet.

Specimens examined. UNITED STATES: California. Santa Barbara County: Cuyler's Harbor, San Miguel Island, 11 June 1930, *Ralph Hoffmann s.n.* (SBM); San Ysidro Canyon, one mile northeast of Montecito, 4 July 1964, R. N. Philbrick 0443 (type, SBBG; isotypes, BH, POM); Middle Canyon, Santa Barbara Island, 22 October 1961, E. R. Blakley 4818 (SBBG); Ventura County: Ventura, 3 October 1936, C. B. Wolf and P. C. Everett *s.n.* (RSA); preceding collection in cultivation, 7 June 1954, E. K. Balls 19515 (RSA); northwest of light house,

¹This treatment differs in significant details from the preliminary treatment offered in the nomenclature section of the author's Ph.D. thesis (Philbrick, 1963).



Opuntia oricola sp. nov. near Santa Barbara, California. These three photographs and the type specimen were all prepared from the same plant. The longitudinally cut flower shows the broad stigma, the bulbous expansion at the base of the style, and the relatively narrow and erect petals. The subspherical fruit is armed with long capillary glochids. This particular plant is about 2.5 meters tall. Flower and fruit photographs are reduced to about nine-tenths of actual size.

East Anacapa Island, 26 April 1959, *E. R. Blakley* 2783 (SBBG); south of radio station, East Anacapa Island, 26 April 1959, *E. R. Blakley* 2784 (SBBG); south of Jackson Hill, San Nicolas Island, 23 April 1961, *E. R. Blakley* 4155 (SBBG); Point Mugu, 8 December 1958, *E. R. Blakley* 2008 (SBBG); Los Angeles County: Playa del Rey, 9 June 1902, *LeRoy Abrams* 2515 (G, MO, POM); Palos Verdes, 15 August 1931, *E. A. Purser* 2183 (SD); San Pedro Hills, 15 July 1932, *F. R. Fosberg* 8614 (POM); San Pedro, 1908, *David Griffiths* 9118 (POM); Orange County: Fullerton, 25 July 1963, *Lyman Benson* 16436 (POM); Rancho Santa Ana, 26 January 1933, *B. D. Stark* 4527 (RSA); five miles north of Laguna Beach, 17 January 1933, *B. D. Stark* 4513 (RSA); San Juan Canyon, 10.5 miles northeast of San Juan Capistrano Mission, 1 April 1958, *R. N. Philbrick* 058 (BH); San Clemente, 21 January 1933, *B. D. Stark* 4520 (RSA); San Diego County: five miles northeast of Bonsall, 26 April 1958, *R. N. Philbrick s.n.* (BH); in cultivation from two miles north of Pacific Beach, 1959, *R. N. Philbrick* P42 (BH, SBBG); Sweetwater River near San Diego, 8 April 1916, *S. B. Parish s.n.* (POM); Kuebler Ranch, Otay Mesa, 17 June 1961, *George E. Lindsay* 3176 (POM); San Ysidro, 10 July 1963, *Lyman Benson* 16359 (POM); 0.5 mile north of Mexican Boundary and 0.5 mile from ocean, 12 July 1963, *Lyman Benson* 16370 (POM).

The herbarium specimens cited above have

been selected on the basis of all the evidence available; no doubtful specimens have been cited. However, it is often difficult to identify a given opuntia plant from an herbarium specimen that lacks flowers or fruits or in which the fleshy parts have been badly distorted during pressing and drying.

Individual illustrations of these plants are also difficult to identify with certainty; but the vegetative characteristics of *O. oricola* are clearly shown by figure 203 in the *Cactaceae* (Britton and Rose, 1919). This figure of a small potted plant is incorrectly labeled *O. littoralis* both by the original authors and by Baxter (1935, p. 55), who reproduced the same illustration.

ACKNOWLEDGEMENTS

Dr. H. E. Moore, Jr., Dr. L. F. Randolph, Dr. Lyman Benson, and Dr. J. R. Haller read and criticized the manuscript for this paper during various stages of its preparation. Dr. William J. Dress suggested the proposed epithet and provided the Latin translation. The availability of the specimens at the institutions cited is also gratefully acknowledged.

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 Britton, N. L., and Rose, J. N. 1919. The Cactaceae, descriptions and illustrations of plants of the cactus family. Carnegie Instit. Wash., Publ. no. 248, vol. 1. Wash., D. C.
 Philbrick, Ralph N. 1963. Biosystematic studies of two Pacific Coast opuntias. Ph.D. thesis, Cornell Univ., Ithaca, N. Y.

EUPHORBIA INTISY

Dear Mr. Haselton,

I am always very glad and grateful to receive your fine *Succulent Journal* and I hope and think that Mr. J. Dodson will send it again, also next year, so that I will always have the full set! U.S.A. with the lot of cacti and other succulents ought to go on with such a publication because it belongs to these plants which are a part of U.S.A. plants!

In the Sept.-Oct. number of 1963 p. 136, I read your notice about *Euphorbia intisy* with great interest. The late Mr. Alain White let me have a plant of it in 1938 by airmail from California which took 14 days and cost him three pounds sterling in stamps. The plant was a descendant of those which were collected by an expedition sent by the U.S. gov't. to Madagascar to get these plants for later cultivation in the United States and at least for plantations in the U.S. deserts for rubber production, as this rubber is as valuable as from the tropical Hevea and other rubber plants. Well, the plant grew well and was planted in one of our succulent conservatories and grew big. It flowered about 20 years later and was a male plant. It was a great pity that one could not raise it from cuttings, layering, etc. It did not strike root and all efforts were in vain. Later on we could not keep it on anymore, as it became dangerous for the conservatory, and we took it out as carefully as

possible and transplanted it in one of our rockeries outside. But it did not do it and died! In the meantime I received young plants, from M. Marnier in France, of the *var. mantyi*. It grew easily from cuttings, and we have now good plants of it. I wonder if the latex of this variety will be as valuable as that of the true *E. intisy*? Have you any experience in this direction? Do you know if the government's plants of *E. intisy* were a success and if plants could be brought to one or the other of your deserts? Do you know something about it? I never heard anything about it again. But I learned that there were difficulties too, with regard to cuttings, etc.

In V. XVII No. 12 of your *Succulent Journal* there was a notice that the late Mr. Sloane used to take one of his *E. intisy* plants for a Christmas tree.

I would be grateful to learn more about this most interesting *Euphorbia* and hope that you will be able to let me know more about it.

I sincerely hope that you will receive these lines in the very best of health! With kindest regards and many thanks in anticipation.

Sincerely yours,
H. HERRE

Dear Dr. Herre,

In response to your inquiry about the success of our government's venture with *Euphorbia intisy*, I