

HOST PLANTS OF *MONEILEMA MICHELbacheri*
LINSLEY IN BAJA CALIFORNIA, MEXICO
(COLEOPTERA: CERAMBYCIDAE)

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ABSTRACT

Four species of cacti (Cactaceae) from the peninsula of Baja California, Mexico, are newly reported as hosts of the adult beetle *Moneilema michelbacheri*: *Opuntia echinocarpa*, *O. molesta*, *O. cholla* and *O. prolifera*. Larvae of the beetle were also reared from root crown and lower stem portions of *O. echinocarpa*. The status of *O. bigelovii*, previously reported as the host plant for *M. michelbacheri*, is discussed.

RESUMEN

Cuatro especies de cactáceas (*Opuntia echinocarpa*, *O. molesta*, *O. cholla* y *O. prolifera*) se informan por primera vez como hospederas de los adultos de *Moneilema michelbacheri* para la península de Baja California. Larvas del escarabajo se criaron utilizando ápices de las raíces y las partes inferiores del tallo de *O. echinocarpa*. Se discute el status de *O. bigelovii* la que ha sido informada como hospedera de los adultos de *M. michelbacheri*.

Five species of cylindrical *Opuntia* have been recorded as host plants for *Moneilema michelbacheri* Linsley. Linsley (1942) reported the host plant as *O. bigelovii* Engelm., at a location 15 miles north of Punta Prieta. I consider this host record dubious and probably an incorrect identification of the cactus because *O. bigelovii* is not widespread in Baja California, and I have been unable to find it in the vicinity of Punta Prieta. Wiggins (1980) records *O. bigelovii* as extending southward onto the peninsula only as far as the Desierto de San Felipe, though Bravo-Hollis (1978) extends the range much further south, "dos o tres millas al norte de Santa Rosalia." I have recorded *O. bigelovii* as far south as ca. 20 miles north of the Rancho El Progreso, south of Bahía de Los Angeles, B.C.N., and in various locations along this gulf route. The cactus is also scattered along hillsides west toward Punta Prieta, though within five to seven miles of Bahía de Los Angeles. Even though the plant's range extends well south of Punta Prieta, it is east of the central plateau escarpment, subsequently dominated by gulf coastal influence, and of a habitat different than that of the inland Punta Prieta region. *Opuntia bigelovii* is a member of the microphyllous desert community, not a member of the sarcophyllous desert characterizing the plateau region (Wiggins 1980). More likely candidates for the Punta Prieta vicinity are the generally similar and very abundant *O. echinocarpa* Engelm. & Bigel. and *O. molesta* Brandegee which occur throughout the Central Desert region. Both Edward S. Ross (a co-collector) and E. Gorton

¹ A portion of this work was conducted as a Research Associate with the Museum of Natural History, College of Idaho, Caldwell, ID 83605, U.S.A.

Table 1. Four host species for adult *Moneilema michelbacheri* Linsley and locations at which they have thus far been recorded in the Central Desert of Baja California, Mexico. Records are for the northern state unless otherwise indicated.

Collection site #s ¹	<i>Opuntia</i> species			
	<i>echinocarpa</i>	<i>molesta</i>	<i>cholla</i>	<i>prolifera</i>
1	X	X	X	
2	X		X	
3		X	X	
4			X	
5			X	X
6		X	X	
7				X
8		X		
9				X
10			X	
11			X	
12	X			

¹ Sites: (1) 9 km NW Rancho Santa Ines, 29°46'N, 114°46'W, el. 550 m. (2) El Crucero, 29°16'N, 114°09'W, el. 610 m. (3) Baja California Sur, 7 km N Rancho Tablon, 27°37'N, 113°21'W, el. 130 m. (4) 1.6 km NE Rancho Santa Catarina, 29°44'N, 115°09'W, el. 300 m. (5) Rancho Mina, 34 km NE El Arco, 28°13'N, 113°10'W, el. 550 m. (6) Valle Montivedeo, La Laguna Wash, 28°55'N, 113°44'W, el. 380 m. (7) San Agustin, 29°56'N, 114°58'W, el. 580 m. (8) 7 mi N El Progreso. (9) Rancho Santa Ines, 29°44'N, 114°44'W, el. 550 m. (10) Arroyo El Rayado, 9.0 km (air) S El Rosario, 29°58'N, 115°46'W, el. 90 m. (11) 24 km (air) SSW Los Flores (abandoned mine), 29°25'N, 113°24'W, el. 160 m. (12) 11.7 km (air) E Punta Canoas, 29°25'N, 115°03'W, el. 95 m.

Linsley (pers. comm.) cannot recall any source for this plant identification and question its accuracy.

Even though the host record for the type series may be erroneous, one male *M. michelbacheri* was taken from a plant of *O. bigelovii* 21 miles S. of Bahia de Los Angeles on 13 August 1982 (PEB #1126).

From the present work four additional cylindrical *Opuntia* species have been recorded as hosts for adult *M. michelbacheri*: *O. echinocarpa*, *O. molesta*, *O. prolifera* Engelm. and *O. cholla* Weber. These collection records were made in the Central Desert (Table 1).

In 1978 and 1979 two larvae (PEB #1270 and #1271) were recovered from the root crown and lower stem portions of *O. echinocarpa* 9 km NW of the Rancho Santa Ines (latitude 29°46'N, longitude 114°46'W, elev. 550 m). These were returned to the lab for rearing. Both were female *M. michelbacheri*; #1270 required the longer time, 455 days, from field capture to adult emergence. In addition, *Moneilema* larvae have been recovered only from *O. molesta*, though not reared to adult for specific identification.

Other singular incidental records include perching of a male on *Echinoceus*, *Mammillaria*, and a juvenile Cardon, *Pachycereus pringlei* S. Wats. (Brit. & Rose). The thorax and abdomen of a female *M. michelbacheri* were recovered from the subterranean root crown of an uprooted *P. pringlei*. Considering the general level of host specificity in *Moneilema* (Raske 1969; Linsley and Chemsak 1985), these instances are not considered the normal pattern for the beetle.

Voucher specimens will be deposited at the Museum of Natural History, College of Idaho, Caldwell; the W. F. Barr Entomological Museum, University of Idaho, Moscow; Universidad Nacional Autonoma de Mexico, Coyoacan; and the collection of the author.

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