

University of Texas Rio Grande Valley

ScholarWorks @ UTRGV

Biology Faculty Publications and Presentations

College of Sciences

5-1986

Esenbeckia berlandieri (Rutaceae) Rediscovered in Extreme Southern Texas

Michael R. Heep

Robert I. Lonard

Follow this and additional works at: https://scholarworks.utrgv.edu/bio_fac



Part of the [Biology Commons](#)

the dirt EJE Central road near the 1,000 m marker. Some workers were carrying their own colony brood of small larvae (about 1.0 mm long), and other workers were carrying ant larvae and pupae captured from other colonies. At 5:20 a.m., a moving "swarm" of workers about one m long and ten cm wide with the nonphysogastric queen running unaided near the middle appeared along the column. The queen and several hundred workers were collected and preserved. Sixteen mites were removed from the queen's body.

We thank Dr. Jose Sarukhan, Director, Instituto de Biología, Universidad Nacional Autónoma de México, and M. en C. Luis Alfredo Pérez J., Jefe de la Estación de Biología Chamela, for inviting us to study at the station and for providing our food and lodging. Also we are grateful to Dr. Stephen H. Bullock, Investigador Asociado, for his kindness and assistance during our work at the station. This research was supported by University Research Committee Grant 005-F83-URC and the Department of Biology of Baylor University.

Resumen—Aunque la trabajadora de *Neivamyrmex graciellae* fue descrito por W. M. Mann en 1926, la reina ha quedado sin descripción hasta ahora. Este trabajo tiene una descripción original y ilustraciones de la reina, con una lista de datos de especímenes conocidos, y observaciones en el campo sobre tres colonias encontradas en la Estación Biología Chamela, Jalisco, México.

LITERATURE CITED

- BORGMEIER, T. 1953. Vorarbeiten zu einer Revision der neotropischen Wandermäusen. *Studia Entomol.*, Nr. 2.
- . 1955. Die Wanderameisen der neotropischen Region (Hym. Formicidae). *Studia Entomol.*, Nr. 3.
- KEMPF, W. W. 1972. Catalogo abreviado das formigas da regio neotropical (Hym. Formicidae). *Studia Entomol.*, Nr. 15:3-344.
- MANN, W. M. 1926. Some new neotropical ants. *Psyche* 33:97-107.
- WATKINS, J. F. 1976. The identification and distribution of New World army ants (Dorylinae:Formicidae). Baylor Univ. Press, Waco, Texas.
- . 1982. The army ants of Mexico (Hymenoptera:Formicidae:Ecitoninae). *J. Kans. Entomol. Soc.* 55:197-247.

JULIAN F. WATKINS II AND CHRISTOPHER J. COODY, *Dept. of Biology, Baylor Univ., Waco, TX 76798.*

ESENBECKIA BERLANDIERI (RUTACEAE) REDISCOVERED IN EXTREME SOUTHERN TEXAS

Esenbeckia berlandieri Baill.(joypoy) is a rare tree of central and northern Mexico (Standley, 1923). It was previously known in the United States from four specimens at a locality about 4.8 km northwest of Los Fresnos, Cameron Co., Texas (Morton, 1930). This locality has since been cleared of most vegetation (Correll and Johnston, 1970). The only other published record of *E. berlandieri* in southern Texas was at or near Santa Maria in the southwestern corner of Cameron Co. (Clover, 1937). The exact location is not known. With the destruction of the vegetation at the Los Fresnos site, *E. berlandieri* was presumably eliminated from the native flora of southern Texas.

In 1984, Don Heep of San Antonio, Texas discovered a tree on the banks of the Resaca del Rancho Viejo between Olmito and San Benito, Cameron Co., Texas, about 12-15 km southwest of the original Los Fresnos site. Michael R. Heep identified it as *E. berlandieri*. A second specimen was found about 10 m from the first, and a third, much larger specimen was found about 80 m southwest of the first two.

The first two trees are somewhat shrub-like, with several ascending stems from a short (< 50 cm) main trunk. The first specimen found is 6-7 m tall, with three stems 10.5, 5.1 and 3.5 cm dbh; the second specimen is 7-8 m tall, with two stems 11.5 and 6.4 cm dbh. The third specimen is arboreous, with one main trunk that has branches arising off of it above about 2 m. The height

(> 10 m) and dbh (22.3 cm) of this specimen exceed the previous descriptions for this species (Standley, 1923; Morton, 1930; Correll and Johnston, 1970; Vines, 1960).

The trees are in a densely wooded strip of remnant woodland dominated by *Pithecellobium flexicaule* (Benth.) Coult. (Texas ebony), *Ehretia anacua* (Teran and Berl.) I. M. Johnst. (anacua), *Ulmus crassifolia* Nutt. (cedar elm), and *Condalia hookeri* M. C. Johnst. (brasil). Many of the other associated species, i.e. *Amyris madrensis* Wats., *Chiococca alba* (L.) Hitchc. (David's milkberry), *Randia rhagocarpa* Standl. (crucillo), *Tillandsia baileyii* Small, *Xylosma flexuosa* (H.B.K.) O. Ktze. (brush-holly), and *Pisonia aculeata* L. (devil's claw) have tropical and subtropical distributional ranges, and reach the northern limit of their ranges in southern Texas. These three trees may be the only extant wild specimens of *E. berlandieri* remaining in the U.S.A.

LITERATURE CITED

- CLOVER, E. U. 1937. Vegetational survey of the lower Rio Grande Valley. Madroño. 4:41-66, 77-100.
- CORRELL, D. S. AND M. C. JOHNSTON. 1970. Manual of the vascular plants of Texas. Tex. Res. Found., Renner, Texas.
- MORTON, C. V. 1930. A new species of *Esenbeckia* from Texas. Journ. Wash. Acad. Sci. 30:135-136.
- STANDLEY, P. C. 1923. Trees and shrubs of Mexico. Contrib. U.S. Nat. Herb. 23:535-536.
- VINES, R. A. 1960. Trees, shrubs, and woody vines of the Southwest. Univ. Texas Press, Austin, Texas.

MICHAEL R. HEEP AND ROBERT I. LONARD, *Dept. of Biology, Pan American Univ., Edinburg, TX 78539.*

PREDATION ON LARK SPARROW EGGS BY A MASSASAUGA RATTLESNAKE

Predation by snakes on bird eggs or nestlings is often suspected but rarely observed. Newman (1970), Best (1978), Gates and Gysel (1978), Wray and Whitmore (1979), and Best and Stauffer (1980) report heavy egg and nestling loss of various passerine birds and suspect various local snake species are important predators. Best (1974, 1978), Facemire and Fretwell (1980), Finch (1981), and Joern and Jackson (1983) observed actual predation by colubrid snakes of the genus *Masticophis*, *Coluber*, *Elaphe* and *Lampropeltis*. Best (1978) suspected that massasaugas (*Sistrurus catenatus*) were nest predators on field sparrows (*Spizella pusilla*) but he never observed predation by this species. Newman (1970) reported that lark sparrows (*Chondestes grammacus*) suffered heavy nest mortality in southern Oklahoma; black rat snakes (*Elaphe obsoleta*) and blue racers (*Coluber constrictor*) were suspected predators. While rattlesnakes (*Crotalus*) occasionally consume bird eggs (Klauber, 1972), massasaugas have only been reported to eat small mice, birds, frogs and lizards (Smith, 1950; Greene and Oliver, 1965; Klauber, 1972).

In the sand prairie region of Stafford Co., Kansas, we located a lark sparrow nest on a section of grazed prairie. The birds nested on the ground at the base of a clump of little bluestem grass (*Andropogon scoparius*). The nest contained six eggs, three of which were cowbird (*Molothrus ater*) eggs. At 0945 on 18 July 1979, the pair of lark sparrows was observed near the nest, making short periodic flights between the ground near the nest and a small dead tree a few meters away. Investigation revealed a 453 mm (total length) massasauga ingesting one of the lark sparrow eggs. This activity did not disrupt the nest structure in any way. The lark sparrows remained in the vicinity until observations ended at 1200 but did not return to the nest. They abandoned the nest by the following morning and were not observed near it for the remainder of the summer.

Support for studies which made this observation possible was provided by NSF Grant DEB 79-05123 to the Junior Author.

LITERATURE CITED

- BEST, L. B. 1974. Blue racers prey on field sparrow nests. Auk 91:168-169.
- . 1978. Field sparrow reproductive success and nesting ecology. Auk 95:9-22.