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## CHROMOSOMAL STUDY OF THE INSULAR SAN JOSÉ BRUSH RABBIT (*SYLVILAGUS MANSUETUS*) FROM MÉXICO

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The San José brush rabbit (*Sylvilagus mansuetus*) is endemic to San José Island, Gulf of California, Baja California Sur, México. This species is considered to be derived from the brush rabbit (*S. bachmani*) from the Baja California Peninsula (Hall, 1981); the two species differ little in pelage color or cranial features.

Little is known of the biology and conservation status of *S. mansuetus*, which the Mexican government considers as rare (Secretaría de Desarrollo Social, 1994). Study of this species' population status is considered a high priority (Chapman and Ceballos, 1990); field survey and genetic research have been recommended to ascertain its current status and relationship to *S. bachmani* (Chapman et al., 1990). Herein we de-

scribe the non-differentially stained karyotype of the San José brush rabbit.

Seven adult (three female and four male) *S. mansuetus* were collected in arid tropical scrub of the west coast of San José Island (24°54'9"N, 110°37'8"W). Voucher specimens (skin, skeleton, and frozen tissues) were deposited in the mammal collection of the Instituto de Biología, Universidad Nacional Autónoma de México (IBU-NAM).

Metaphase chromosome spreads were obtained from bone marrow with the colchicine-hypotonic method of Baker and Qumsiyeh (1988). Ninety-four fields on 20 chromosome slides were examined to determine the diploid number. Conventional karyotypes were pre-

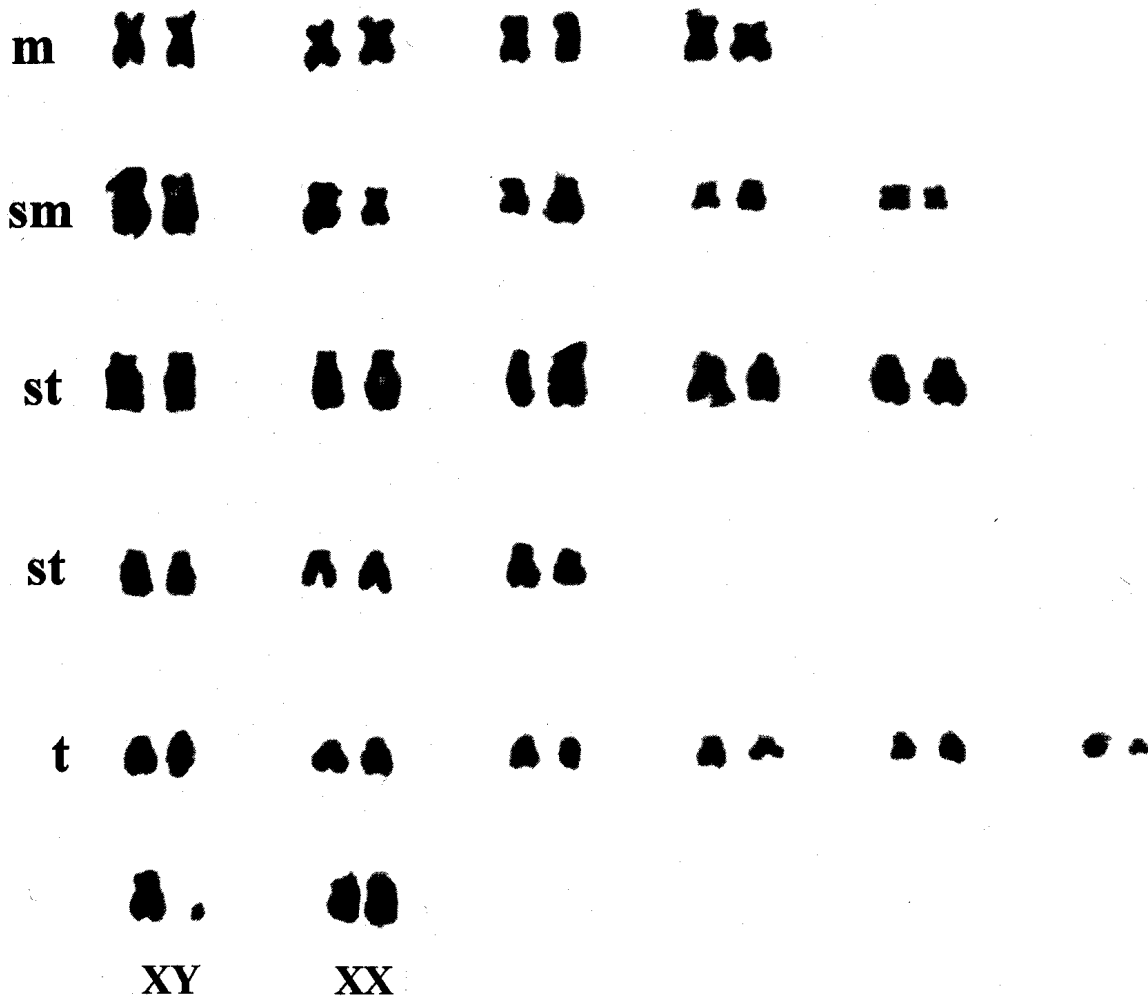


FIG. 1.—Composite karyotype of the San José brush rabbit (*S. mansuetus*; male, IBUNAM 36783, female, IBUNAM 36778) from San José Island, Gulf of California, Baja California Sur, México; m = metacentric, sm = submetacentric, st = subtelocentric, t = telocentric, XY and XX = male and female (inset) sex chromosomes, respectively.

pared from photographs of selected metaphase spreads. Chromosomes were classified on the basis of centromere position following Naranjo et al. (1983) and Levan et al. (1964).

*Sylvilagus mansuetus* has a diploid chromosome number ( $2n$ ) of 48 and a fundamental number (FN) of 80 (Fig. 1). The karyotype comprises 4 pairs of large to medium metacentric, 5 pairs of large to medium submetacentric, 8 pairs of large to medium subtelocentric, and 6 pairs of medium to small telocentric chromosomes. The X-chromosome is medium and submetacentric, while the Y-chromosome is small and telocentric.

The  $2n$  and FN of *S. mansuetus* are the same as those figured for *S. bachmani* by Worthington (1970). Within the genus *Sylvilagus*, only *S. bachmani* and *S. mansuetus* have a  $2n$  of 48, similar

to what is regarded as the primitive karyotype of *Sylvilagus* (Robinson et al., 1984). Only *S. transitionalis* has a higher  $2n$  (52; Ruedas et al., 1989). Autosomes of *S. mansuetus* did not show secondary constrictions like those reported by Worthington (1970) for *S. bachmani*. Size and morphology of the sex chromosomes for both species are apparently the same.

El conejo matorralero de la Isla San José (*Sylvilagus mansuetus*) es endémico de la Isla del mismo nombre, en el Golfo de California, Baja California Sur, México. Esta especie está estrechamente relacionada al conejo matorralero (*S. bachmani*), pues son similares en sus características craneales y color de pelaje. Sin embargo, se desconoce si también son similares cromosómi-

camente. Se colectaron tres hembras y cuatro machos de *S. mansuetus*. Para este trabajo se obtuvieron los cromosomas de médula ósea y se clasificaron de acuerdo a la posición del centrómero. *S. mansuetus* tiene  $2n$  de 48 y un NF de 80. El cariotipo comprende 4 pares de cromosomas metacéntricos, 5 pares de cromosomas submetacéntricos, 8 pares de cromosomas subtelocéntricos y 6 pares de cromosomas telocéntricos. El cromosoma sexual X es submetacéntrico mediano, y el Y, es telocéntrico pequeño. Se concluye que el  $2n$  y el NF de *S. mansuetus* son los mismos que los de *S. bachmani*, y la morfología y tamaño de los cromosomas sexuales de ambas especies son similares.

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### FIRST RECORD FOR THE KINKAJOU, *POTOS FLAVUS* (CARNIVORA: PROCYONIDAE) IN TAMAULIPAS, MEXICO

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The kinkajou, *Potos flavus*, is a nocturnal procyonid that is common to tropical rain forest habitat (Emmons, 1990). This species is considered rare by the Mexican Federal Government (*Diario Oficial*, 1994), and is currently listed in

Appendix III of the Convention of International Trade of Endangered Species (Emmons, 1990). The distribution of the kinkajou in México is not well known (Ramírez-P. et al., 1986). Based on a visual record, Leopold (1959) stated the north-