

NOTES

CHROMOSOMES OF THE DESERT SHREW, *NOTIOSOREX CRAWFORDI* (COUES).—The monotypic species, *Notiosorex crawfordi* (Coues), has not been extensively collected. For this reason, little attention has been paid to the systematics of northern populations of this shrew. According to Hall and Kelson (The Mammals of North America 1: 65, 1959), the forms from Arizona and Texas are both classified as *N. crawfordi* (Coues).

We have collected four specimens of *N. crawfordi*, one male from Santa Rita Experimental Range, Pima Co., Arizona, and three (2 ♂♂, 1 ♀) from Post, Garza Co., Texas, for cytological examination.

All specimens were collected from woodrat (*Neotoma*) dens: the Arizona specimen was taken from a den of *N. albigula* and the Texas specimens from dens of *N. micropus*.

Lung tissues were employed for initiation of cultures, and the primary cultures (7 to 10 days old) were used for squash preparations. All samples exhibited large numbers of metaphase cells.

From all metaphase with complete cellular outline (approximately 50 from each specimen), the chromosome number of each sample did not vary. The Arizona specimen showed a diploid number of 62 and a fundamental number of 94 (Fig. 1), and the Texas specimens, 68 and 102 respectively (Fig. 2). The samples from the two populations not only differed in diploid numbers, but also in chromosome morphology. The individual from Arizona contained 34 biarmed and 26 acrocentric autosomes. Among the biarmed autosomes, 10 pairs were near metacentrics, and the

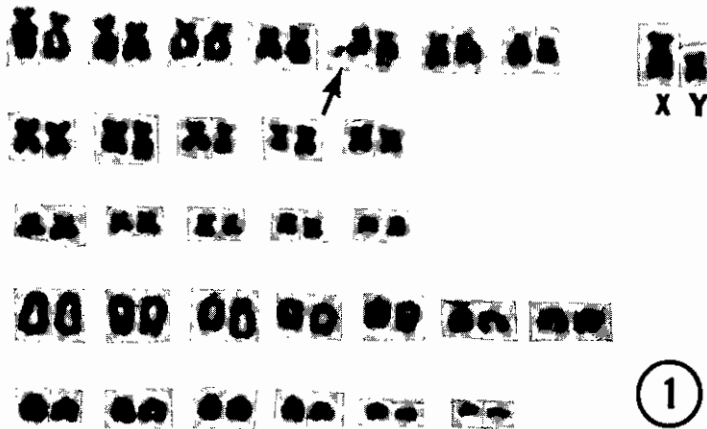


Fig. 1. Karyotype of a male *Notiosorex crawfordi* from Santa Rita Pima Experimental Range, Co., Arizona.

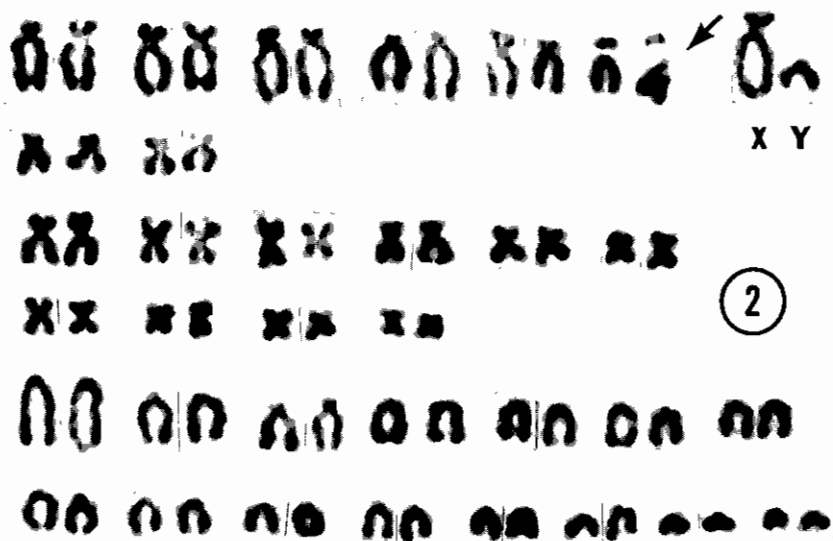


Fig. 2. Karyotype of a male *Notiosorex crawfordi* from Post, Garza Co., Texas.

remaining pairs showed unequal arm lengths. One of the submetacentric pairs had a conspicuous secondary constriction (possibly nucleolus organizer) at the distal portion of the long arm (arrow, Fig. 1). Hsu, Brinkley and Arrighi (*Chromosoma*, 23: 137-153, 1967), reported that the majority of the metaphase spreads from lung culture exhibited only one secondary constriction, and the homologous chromosome either showed a weak indication of a constriction or no constriction at all. The X chromosome was apparently a submetacentric, and the Y, a small metacentric.

The three specimens from Texas agreed with one another in karyotypes. There were 36 banded and 30 acrocentric autosomes. Among the banded elements, 10 were metacentric, and the remaining pairs showed unequal arm lengths. A secondary constriction was located near the centromere of a submetacentric pair (arrow, Fig. 2). The X chromosome was similar to that of the Arizona specimen, but the Y was apparently an acrocentric.

Our meager data demonstrate a need for chromosomal studies of additional populations of this species, especially in the areas between the samples reported here. Furthermore, it is desirable to analyze larger sample sizes than ours in each case. It is hoped that this report will generate interest so that additional *Notiosorex* will be karyotypically analyzed. Such results should reveal considerable information on the biology of *Notiosorex crawfordi*.

Voucher specimens are deposited in the collection of mammals, Department of Biology, Texas Tech University, Lubbock (numbers 7025, 7027, 7325, 8402 and karyotype slides numbers TCH 915, 916, 917, 143 respectively). Robert J. Baker and T. C. Hsu, Department of Biology, Texas Tech University, Lubbock, and Section of Cell Biology, M. D. Anderson Hospital and Tumor Institute, Houston, Texas.

SILVER-HAIRED BAT AT WICHITA FALLS, TEXAS.—Two male silver-haired bats, *Lasiorycteris noctivagans*, were collected within the city limits of