A karyotypic study on the Indian Crested Porcupine, *Hystrix indica* (Kerr, 1792), in Turkey (Mammalia: Rodentia)

by Atilla Arslan

Abstract. A study of two *Hystrix indica* females revealed that the diploid number of chromosomes (2n) is 66, with a fundamental number (FN) of 116. The number of autosomal arms (NFa) is 112. The X chromosome is metacentric and is the largest.

Kurzfassung. Die Untersuchung von zwei weiblichen Stachelschweinen *Hystrix indica* ergab, dass der diploide Chromosomensatz (2n) 66 beträgt, mit einer Grundzahl (FN) von 116 Chromosomen. Die Anzahl der autosomen Arme (NFa) beträgt 112. Das X-Chromosom ist metazentrisch und das größte.

Key words. *Hystrix indica*, karyotype, cytogenetics, Turkey, Middle East.

Introduction

The distribution of the Indian Crested Porcupine, *Hystrix indica* (Kerr, 1792), ranges from Arabia to Turkey, the southern and eastern states of the former Soviet Union to the south of the Indian subcontinent (ELLERMAN & MORRISON-SCOTT 1951, HARRISON & BATES 1991). The karyotype of *H. indica* was described earlier by RAMAN & SHARMA (1971) from India. The closely related species *Hystrix cristata* Linnaeus, 1758 was investigated by RENZONI (1967) from Italy, GEORGE (1980) from Kenya and WURSTER et al. (1971), and the karyotype of *Hystrix brachyura* Linnaeus, 1758 was determined by YONG (1973).

We present here karyological data on *H. indica* from Turkey and compare them with those from other parts of the species' distribution range.

Material and methods

Two injured females of *Hystrix indica* were obtained from hunters from Bozyazı (İçel prov.) and Ceyhan (Adana prov.) in 2005. Blood samples were taken directly from the heart, and cultured for 72 hours at 37°C in 10 ml of medium supplemented with 15% fetal calf serum, antibiotics (penicillin 250 U/ml and streptomycin 250 mg/ml), and phytohaemaglutinin. Five mg/ml colchicine was added for 2 hours before harvest. Twelve slides were prepared and 20 to 30 metaphase spreads were examined. The chromosome morphology was established according to ZIMA (1978) and HILLIS et al. (1996), by calculating centromeric indexes. The diploid number of chromosomes (2n), the fundamental number (FN), the number of autosomal arms (NFa) as well as metacentric (m), submetacentric (sm)/subtelocentric (st) and acrocentric were determined.

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