Karyological Studies on Hammerhead Flatworm, Bipalium kewense (Tricladida, Terricola) from Thailand

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ABSTRACT

Species of the Bipalium genus (bipaliid land planarian) are widely distributed in the Southeast Asia, around greenhouses and gardens. However, taxonomy and cytogenetic data in this genus are restricted to few species. In this way, the present study includes the chromosomal investigation, using conventional (Giemsa staining) approaches in Bipalium kewense from Northeast Thailand. The specimen, B. kewense with two dorsal stripes and a blackish brown head crescent, a lunate head moderately developed (40–150 mm long and 3–5 mm wide); light yellowish brown with one broad mid-dorsal and two marginal stripes; without stripes on the ventral side. The results showed that B. kewense had 2n=10, and the fundamental number (NF) was 20. The types of chromosomes are 2 large metacentric, 2 medium metacentric, 2 medium submetacentric and 4 medium acrocentric chromosomes. The karyotype formula of Bipalium kewense is as follows: 2n (10) = $L^m_2+M^m_2+M^m_2+M^a_4$ or 2m+2a+2a+2m+2sm

Keywords: Land planarian, Terricola, Platyhelminthes, chromosome

INTRODUCTION

Land planarians are one of the most unusual and interesting creatures in and around greenhouses and gardens. Its 54 described species exhibit a complex taxonomy with cryptic lineages across their extensive distribution showing typical characteristics of the distinctive shape of their head region and stripes on the body. This animal belongs to one of the most ancient animal groups, the