Introduction

The family Tanypezidae (Diptera: Schizophora: Diopsioidea) in the narrow sense is a small, morphologically conserved family found predominantly in the neotropics, although the two species of *Tanypeza* Fallén, 1820 occur only in the north temperate regions. This distribution strongly suggests a New World origin for the family, particularly since both species of *Tanypeza* occur in the Nearctic, with *T. picticornis* Knab & Shannon, 1916 found in eastern North America and *T. longimana* Fallén, 1820 found throughout much of the Holarctic Region (Steyksal 1965, Stackelberg 1988, Roháček 1998). Some authors, however, including Griffiths (1972) and D.K McAlpine (1997), also choose to include within the Tanypezidae the slightly larger and predominantly Oriental family Strongylophthalmyiidae, which contains the genera *Strongylophthalmyia* Heller, 1902 and *Nartshukeia* Shatalkin, 1993, and also has a minority of species in the north temperate Regions (Shatalkin 1994, 1996; Iwasa 1998; Barber 2006). Both families are very well supported as monophyletic, as is their sister group relationship (see Roháček 1998), with most characters uniting the larger clade being male and female genitalic. *Neotanypeza dominicana* sp. n., described below, is the first known representative of either family in the fossil record.

A revision of the extant members of the Neotropical fauna is currently being developed (Lonsdale, in manuscript) and will include a redefinition of all genera in the Tanypezidae and Strongylophthalmyiidae, a reassessment of the higher classification of the two families, and provide a phylogenetic context for the fossil species. *Neotanypeza dominicana* shares the relatively conservative external morphology characteristic of other neotropical Tanypezidae, having an elbowed antenna, no vibrissae, a medially narrowed male frons, reflective anterolateral stripes on the frons, a flat and tomentose “ocellar disc” behind the ocellar tubercle, silvery stripes on a stout thorax that contrasts with long slender legs, a swollen ventrobasal protuberance on the hind basitarsomere, apical convergence of veins R4+5 and M1+2, dorsal setulae on vein R1, a complete subcostal vein, a row of dark setulae on the stalk of the halter, a greater ampulla, narrow abdominal sternites, a silvery tomentose male sternite 8 and fusion of the surstylus to the epandrium. The fossil species is distinct from extant neotropical tanypezids in having a relatively long and well-developed postvertical bristle, an incomplete medial band on the hind femur and a straight hind tibia that is not deviated subbasally. The single known male is preserved in Dominican amber, which dates the specimen to the
Figs 1–3. *Neotanypeza dominicana* sp. n. – 1, dorsal; 2, abdomen, ventral; 3, dorsal, close-up of thorax and head.