Karyosystematics and Morphology of Two North European Species of the Chironomus maturus-Complex (Diptera: Chironomidae)

Wolfgang Wülker

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The maturus-complex of Chironomus (chromosome arm combination AF, CD, BE, G), previously discovered in North America, occurs also in Europe. 2 species were found in small pools in N' Sweden. Their karyotypes and larval morphology are described and their relations to C. maturus Johannsen 1908 and C. whitseli Sublette & Sublette 1974 in N’ America as well as their position in the phylogenetic system of the genus are discussed.

Key words: karyotypes — larval morphology — Chironomus (Chironomidae) — northern Sweden — holarctic distribution.


1 Introduction

The maturus-complex of the genus Chironomus characterized by an arm combination AF, CD, BE, G of the polytene salivary gland chromosomes, is known since Wülker et al [1968].

Martin et al [1974] pointed out that “the maturus-complex is related at the region of differentiation of the thummi- and pseudothummi-complexes” and indicated the possibility that it might have the same holarctic distribution as these well known and most frequent complexes of the genus. Two nearctic species, C. maturus Johannsen 1908 and C. whitseli Sublette & Sublette 1974 were placed in the maturus-complex, the former being distributed over the whole continent, the latter confined to California. A description of adults, pupae and larvae was published by Sublette & Sublette [1974], the salivary glands chromosomes were analyzed by Wülker & Martin [1974].

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