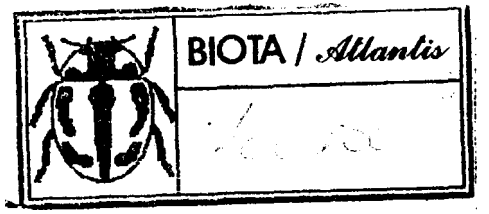

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A collection of Chironomidae (Diptera) from La Gomera, Canary Islands

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The Canary Islands, though situated 300 km off the west coast of Africa, belong to the western Palaearctic zoogeographical region. They are volcanic in origin and have never been attached to the mainland. The islands of Tenerife, La Palma, La Gomera and El Hierro form the Spanish provincc of Santa Cruz de Tenerife. Situated bctwcen the othcr three islands, about 25 km from Tenerife and about 50 km from El Hierro and La Palma (Fig. la), the rugged island La Gomera rises to about 1500 m and is scored by numerous deep ravines, but today only onc permancnt running water stretch remains, near El Cedro in the Barranco del Cedro that runs north-east from the island's centre.

Only on Tenerife has there been extensive work on freshwater habitats and this mainly restricted to streams (Malmqvist *et* al., 1993). A survey of Chironomidae of lotic and lentic habitats on Tcnerife is in progress (Armitage *et* al., 1994). In February 1993 C.O. visited the island of La Gomera and made a collection of chironomid pupal exuviae from a rivulet and a small artificial pool (Fig. 1b).

Site 1

Rivulet that runs to Playa Machal in Barranco del Revolcader between Lomo del Higueral and El Verdal south of San Sebastian de la Comera. The sample was taken where the path crosses the brook. The water discharge was very low (less than 0.25 l per second), with a maximum depth in pools of about 10 cm. In the pools thc substratum comprised a thin layer of fine detritus with some filamcntous algae resembling *Cladophora*. The water temperature was probably in the range 25–30°C.

Cricotopus (Cricotopus) vierriensis Coetghebuer

Langton (1991) gives one character as charactcristic for the species: dorsocentral seta 2 very long, dorsocentral seta 1 shorter but longer than setae 3 and 4. In the La Comera specimens and in those seen from Tenerife dorsocentral seta 2 is not longer than 1, though both are much stronger than 3 and 4, an unusual arrangcment for the genus *Cricotopus*. In European populations this condition occurs sporadically; on prescnt cvidcnce this variety has stabilizcd in thc Canary Islands.

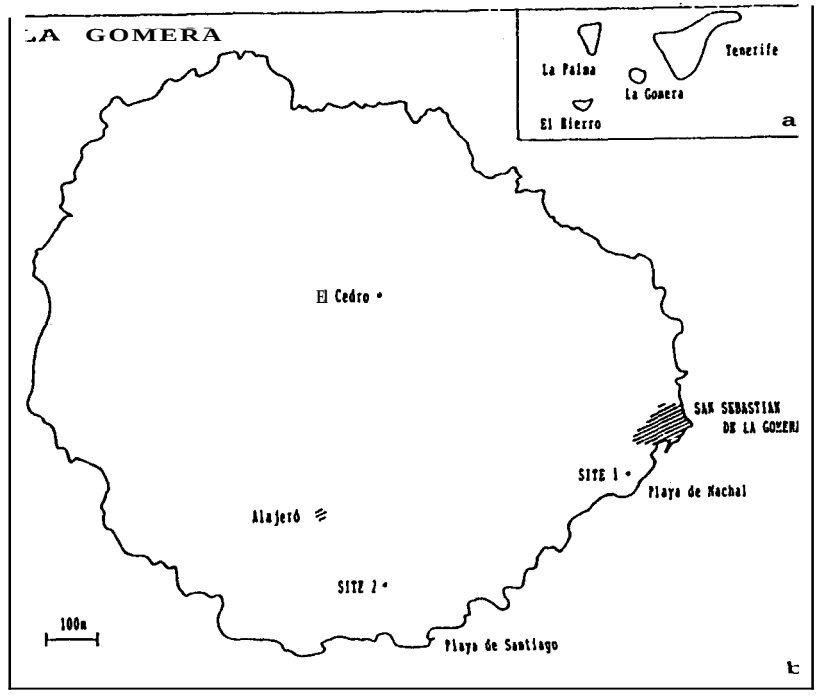

Fig. 1. (a) position of La Gomera in relation to neighbouring islands; (b) locations on La Gomera of places mentioned in the text.

Paratrichocladius rufiventris (Meigen)

This is a widespread and common species in running water throughout the Palaearctic region. Armitage *et* al. (1994) suggest that there may also be another closely related species on Tenerife.

Cricotopus (Cricotopus) annulator Goetghebuer

This species has a Holarctic distribution, but has not previously been recorded from the Canary Islands. Although the specimen is incomplete, there is little doubt that the identification is correct.

Orthocladius (Orthocladius) rivinus Kieffer

Although recorded only from Europe, it probably has a Holarctic distribution (Langton, in prep.). As with this example, specimens occur with reduced forking of sternite setae throughout its range and compound the difficulties experienced in identifying the species of this subgenus. This is the first record of the species for the Canary Islands.

Site 2

A small stagnant pool of a former aqueduct by the footpath on the western side of Barranco de los Cocos, 1.0–1.5 km from Playa de Santiago on the southern coast on the way to Alajeró. It had an extent of 1 x 2 m, with a depth of about 20 cm. The surface was covered with duckweed (Lemnaceae) and the substratum had a thin layer of fine detritus.

Chironomus Pe 20 Langton (1995) and *Chironomus* Pe 21 Langton (1995)

Both of these forms have been found on Tenerife. They differ from known western Palaearctic taxa. Their identity can be resolved only through rearing and karyology of larval polytene chromosomes.

Discussion

Volcanic islands with a paucity of freshwater habitats are unlikely to support many species of Chironomidae. (Of course, in the past, before deforestation and extensive use of ground water resources for irrigation, La Gomera must have been rich in aquatic habitats which could well have supported a wider range of chironomids than today.) The species recorded confirm the Canary Islands' zoogeographic position in the western Palaearctic region. It would not be unexpected that towards the far south-west of their distribution some taxa may have a character range that does not coincide with the means for the species elsewhere. If the differences recorded here are shown to be constant for larger samples, subspecific status may be warranted.

The two species recorded as new for the Canary Islands may well be represented in the Tenerife collections: larvae of an unnamed *Cricotopus* sp. and an *Orthocladius (Orthocladius)* sp. are recorded in Armitage *et* al. (1994).

It is tempting to suggest endemic status for the two *Chironomus* species. However, the life histories of most North African *Chironomus* are unknown and the recently described *Rheotanytarsus rioensis* Langton & Armitage (1995) from Tenerife has since been collected in Israel (F. Reiss, pers. comm.), making any such suggestion premature.

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