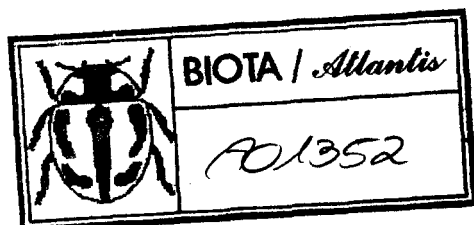


Immigration of the Oriental Latrine Fly, *Chrysomya megacephala* (FABRICIUS) and the Afrotropical Filth Fly, *Ch. chloropyga* (WIEDEMANN), into the Canary Islands (Diptera, Calliphoridae)



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During the undertaking of an ecological study of drosophilids on the Island of Tenerife, numerous flies belonging to other families were also captured with baited traps of the TODA type (TODA, 1977). From the first moment of the study (Nov. 1978 to Oct. 1979), individuals of a strange calliphorid fly, hitherto unknown in the Canary Islands, came to the trap situated in a garden of the capital. This is later identified as the Oriental Latrine Fly, *Chrysomya megacephala* (FABRICIUS), which is known to extend its range. At the present day, this species of medical importance has invaded the Palearctic Region via Afghanistan and come to colonize the Afrotropical and Neotropical Regions (KURAHASHI, 1978; GUIMARAES *et al.*, 1978). The introduction of *Ch. nzegecephala* was so recently indeed given that it has not been detected until now, despite the numerous surveys have been made by BAEZ and SANTOS-PINTO (1975). HANSKI (1977), who collected many flies for the ecological study on the carrion visitors in Santa Cruz de Tenerife, failed to find this species, although he captured the Afrotropical species, *Ch. chloropyga* (WIEDEMANN) at latter site. This was a first record of the Afrotropical Filth Fly from the Canary Islands. The fluctuation of *Ch. megacephala* in Santa Cruz de Tenerife during the following year are as shown in Fig. 1. Figure shows that the number of flies captured came to maximum during the coldest and most humid months, while it became minimum in the dry season. Annual fluctuation of this new immigrant is similar to that of other groups of Canarian flies (AROCHA *et al.*, 1978; BAEZ, in press). Larval development of saprophytic species is favored and completed in medium in a high humidity where the food does not dry out quickly (GREENBERG, 1973).

It is likely that our initial record of *Ch. megacephala* in Santa Cruz and the following intra- and interinsular distribution seems to be introduced by maritime route. ILLINGWORTH (1926) already reported this type of colonization by ships for this fly. He observed it on board a ship bound for Hawaii from Shanghai. We also observed an immigration of foreign species into an island by ships in the case of *Ch. choloropyga* (HANSKI, (1977)). The species was captured for the first time on

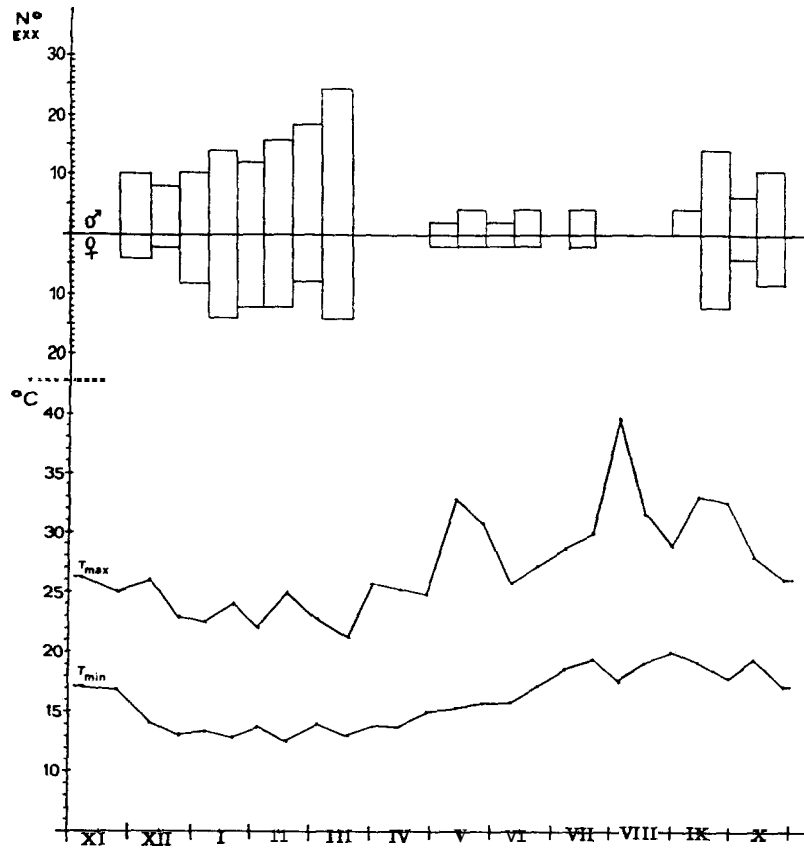


Fig. 1. Fluctuation of *Ch. megacephala* in Santa Cruz de Tenerife for a year (Nov. 1978 to Oct. 1979). T_{max} : maximum temperature; T_{min} : minimum temperature.

broad a ship which come from Fernando Poo I. and moored at the harbor of Santa Cruz. After the new record, BAEZ paid special attention to this species and succeeded in finding it at other sites on Tenerife and further on the islands of Fuerteventura and Lanzarote in the following months. It may be probable that the distribution has amplified to a considerable degree for a short period in the Canary Is. The immigration of foreign species into the Archipelagos is highly feasible as a consequence of commercial activities increased. The other Canarian species, *Ch. albiceps* (WIEDEMANN), also, seems to be a representative of old immigrant from African continent.

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