

A₂₊₈₊₉ is a gene arrangement that recently originated by transposon induced mutation or it is a rare and endemic arrangement for the south-eastern regions of Europe.

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Bibliography on the *Drosophila bipectinata* species complex.

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This bibliography includes the papers published on the *bipectinata* complex which consists of four species: *D. bipectinata*, *D. malerkotliana*, *D. parabipectinata*, and *D. pseudoananassae*. The *bipectinata* complex belongs to the *ananassae* subgroup of the *melanogaster* species group. However, the abstracts of symposia and conferences have not been included. In this bibliography we have tried to cover the literature of all four members of the *bipectinata* complex up to May 2000. We apologize to the readers for inadvertent omission of any paper. One (SS) of the authors thanks the CSIR, New Delhi for the award of Research Associateship (RA) to her.

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Drosophila distribution in Ecuador.

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The first studies on *Drosophila* in South America were performed by Duda (1925), Dobzhansky and Pavan (1943), Pavan and Da Cunha (1947), and Brncic (1957). Such studies did not cover many zones due to geographic inaccessibility, such as the Andes mountain range or desert zones considered unimportant. From the 80's on, research on this genus has increased as demonstrated by the research works of Vilela (1983, 1984), Vilela and Bächli (1990), Vilela *et al.* (1983), Sene *et al.* (1980), Tidon-Sklorz *et al.* (1994) in Brazil; Pilares *et al.* (1990) in Peru; and Hasson *et al.* (1991) in Argentina. Thus, at present, we have a better knowledge about *Drosophila* in South America. However the data on its ecology and distribution are partial.

In Ecuador, little interest has been placed on *Drosophila* research. The knowledge we have of the fauna of *Drosophila* is that of Wheeler *et al.* (1962), who reported the presence of one *Drosophila* species in the Cotopaxi province, which has not yet been described. Carson *et al.* (1983) also reports a new species: *D. xerophila* in the Galapagos Islands. However recent studies made in continental Ecuador show that this country has a high diversity of *Drosophila*, as shown by the studies of Rafael and Arcos (1988, 1989).

In the "Costa" –the lowland region between the Andes and the Pacific Ocean– *Drosophila* has been reported in three provinces (Rafael *et al.*, 2000), whereas in the mountain region or "Sierra" it is reported to appear in seven provinces (Figure 1). It must be mentioned that the better-studied zones are those in the Pichincha province:

- a) In the Guayllabamba Valley (30 km. north-east of Quito). This area is dominated by Thorny Shrub Lower Mountain vegetation (1020 – 2600 meters) and Dry Lower Mountain Forest (2000-3000 m). In these types of vegetation, 27 *Drosophila* species classified in nine species groups were reported (Table 1), 21 of these observed in laboratory emerging from rotten fruits (Rafael *et al.*, 2000).
- b) In the Paschocha Forest, which corresponds to Very Humid Mountain Forest (above 3000 m), 44 species were reported, all except one (*D. paraguayensis*, a new record for Ecuador) new to science (Vela, 1999). Though 22 species out of the 43 have not been grouped yet, the other 21 species have been classified in six species groups (Vela, 1999): *tripunctata*, *mesophragmatica*, *flavopilosa*, *guarani*, *repleta* and *onychophora* (Table 2).