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References: Guru Prasad, B.R., and S.N. Hegde 2010, Journal of Insect Science 10: 123; Guru Prasad, B.R., and S.N. Hegde 2006, Dros. Inf. Serv. 89: 10-11; Guru Prasad, B.R., and S.N. Hegde 2006, Dros. Inf. Serv. 89: 29-3; Throckmorton, L.H., 1975, In: *Handbook of Genetics* (King, R.C., ed.). Plenum Press, New York, pp. 421-467; Bachli, G., 1998, Higher Brachteera Science Herald, Budapset: 1-120.



First registry of *Canalineia* group (Diptera, Drosophilidae) at Santa Catarina State, South Brazil.

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Introduction

The *Canalineia* group includes *D. albomarginata* Duda, *D. annularis*, Sturtevant, *D. annulosa* sp. nov. *D. canalinea* Patterson & Mainland, *D. canalinioides* Wheeler, *D. davidgrimaldii*, sp. nov., *D. hendeli*, sp. nov., *D. melanoptera*, Duda, *D. panamensis* Malloch, *D. parannularis*, sp. nov., and *D. procanalineia*, Wheeler. Its diagnosis includes body color mainly dark brown, mesonotum usually with dark spots at bristles bases and complex pattern of brown and yellow areas, forming diffuse longitudinal stripes, basal scutellars convergent, legs mostly dark, tibiae yellow with 2 brown rings, cross vein clouded, and tergites with broad, brown medially narrowly interrupted marginal bands. The distribution of this group is not well known, especially because it has been widening the colonizing areas in the last ten years in the Brazilian south region.

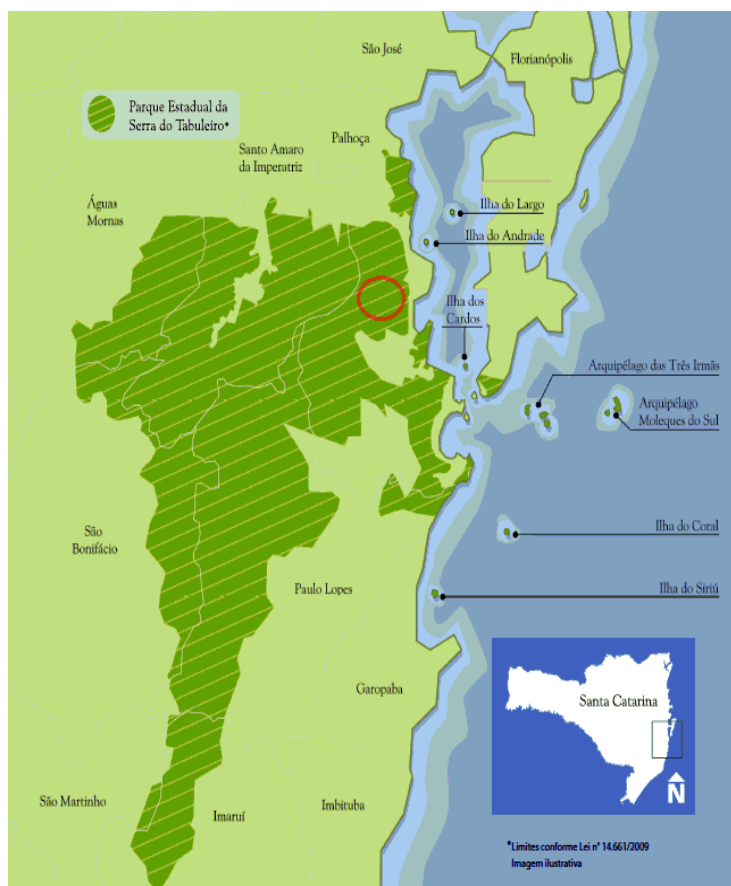
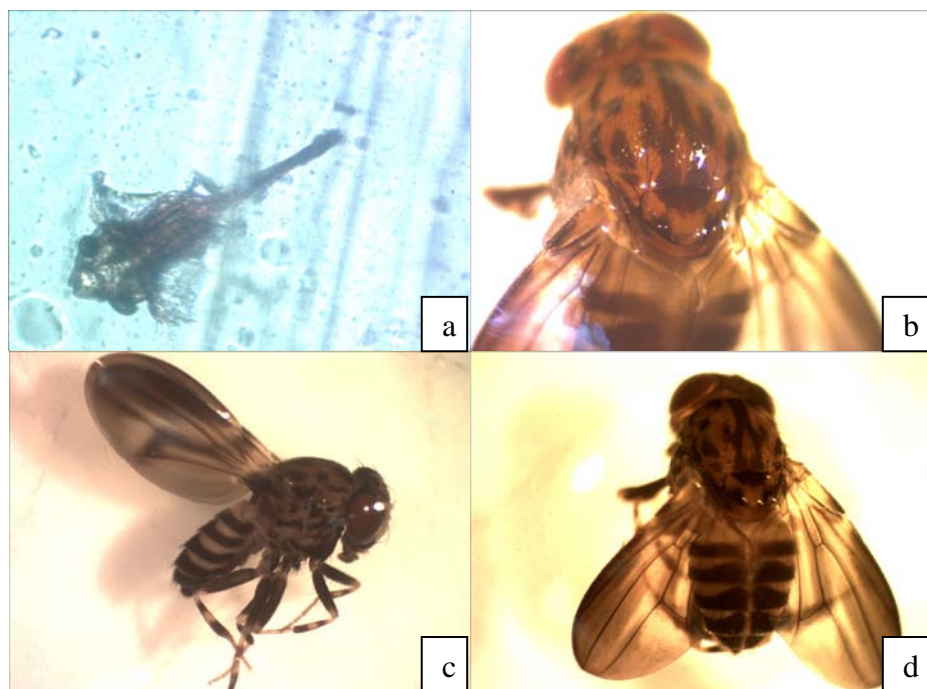


Figure 1. Map - showing the Santa Catarina State, south of Brazil, with the collecting point and a zoom view of the area. Reference: www.google.com.br/maps/

Material and Methods

The individuals of *Canalineia* group were collected in September, 2014, with traps containing fermented banana baits (Roque



and Tidon, 2011), in a protected area included at Parque Estadual Serra do Tabuleiro (Figure 1) with geographical coordinates: 27°48'20" S; 48°33'50" W. Adults collected were identified according with external morphology (Freire Maia and Pavan, 1949), after which, the male genitalia dissection technique of was performed (Kaneshiro, 1969).

Figure 2. Pictures of external morphology of *Canallinea* group male terminalia, in a frontal view (a) and parts of the body (b, c, d) in different views.

Results

Three male individuals of *Canallinea* group were collected in a protected area included at Parque Estadual Serra do Tabuleiro, Santa Catarina State, South of Brazil. The frontal view of the internal male terminalia (Figure 2) shows very similar with *D. canallinea*, but not so angulous. In this three individuals the tip of *aedeagus* is more rounded.

Conclusions

This is the first record of *Canallinea* group in this area of Santa Catarina State, that spread broadly its distribution, in these last 10 years, since it was collected by Doge, *et al.* (2008) in Joinville, SC. Further studies must be done about the dispersion and ecology, the breeding and feeding sites, of these groups as well as the description of these and 3 other new species of this group founded in the Santa Catarina State (Doge, *et al.*, 2008).

References: Döge, J.S., V.L.S. Valente, and P.R.P. Hofmann 2008, Revista Brasileira de Entomologia 52: 615-624; Freire-Maia, N., and C. Pavan 1949, Cultus 1: 1-171; Kaneshiro, K.Y., 1969, University Texas Publication 6918: 55-70; Ratcov, V., and C.R. Vilela 2007, Revista Brasileira de Entomologia 51: 3; Roque, F., S.C.F. de Oliveira, and R. Tidon 2011, Dros. Inf. Serv. 94: 140-141; Vilela, C.R., and F.C. Val 2004, Revista Brasileira de Entomologia, 48: 1.



Viability and lifespan effect of *Drosophila* vital gene *hsf* under elevated temperature conditions.

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There are less studied cases of haplo-advantage described for mutations of some genes influencing longevity and stress resistance, observed in *Drosophila*. Thus, null-allele of *Methuselah* (*mth*) gene displayed