

PICTORIAL KEY TO CALLIPHORIDAE GENERA (DIPTERA) IN SOUTHERN BRAZIL.

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SUMMARY: A pictorial key to Calliphoridae genera to Southern Brazil and vicinities was made using characters for an easy identification. The genera used into the construction key were: *Cochliomyia* Townsend, 1915; *Chrysomya* Robineau-Desvoidy, 1830; *Paralucilia* Brauer & Bergenstamm, 1891; *Hemilucilia* Brauer, 1895; *Comptosomyiops* Townsend, 1918; *Chloroprocta* Wulp, 1896; *Sarconesia* Bigot, 1857; *Lucilia* Robineau-Desvoidy, 1830 [*Phaenicia* Robineau-Desvoidy, 1830]; *Calliphora* Robineau-Desvoidy, 1830; *Laneela* Mello, 1967; *Mesembrinella* Giglio-tos, 1893 e *Huascaromusca* Townsend, 1918.

KEY WORDS: Calliphoridae, pictorial key, South Brazil.

INTRODUCTION

Because of their biological characteristics, the family Calliphoridae (Diptera), has great importance in animal and human health, carrying pathogens and causing myiasis. The feeding habits of larvae and adults contribute respectively to corpse decomposition and pollination.

CATTS & GOFF (1992) mention the importance of calliphorids, among other insects, in the criminological investigation, to estimate the post-mortem period as well as, the detection of drugs and toxins ante-mortem, making it necessary to know the species that are present in the various regions and also their respective biology.

DEAR (1979) elaborated a review of Toxotarsinae (Diptera, Calliphoridae), where *Sarconesia* is the only genus mentioned for Southern Brazil.

MARILUIS (1981) elaborated a key for species of Calliphoridae in Argentina, registering the occurrence of 18 species in eight genera.

DEAR (1985) in his review of Chrysomyini in the New World, mentions the occurrence of the genera *Chrysomya*, *Chloroprocta*, *Paralucilia*, *Hemilucilia*, *Cochliomyia* and *Comptosomyiops*.

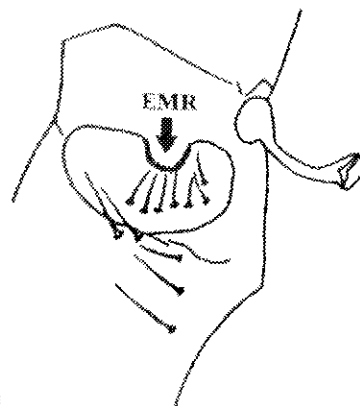
QUEIROZ & CARVALHO (1987) carrying out a survey of muscoid dipterans in landfills and garbage composting plants, in the cities of S. José dos Pinhais and Curitiba, PR, observed

the presence of *Chrysomya megacephala*, *C. putoria*, *C. albiceps*, *Lucilia eximia* and *Sarconesia chlorogaster*, evidencing the importance of Calliphoridae in public health.

VIANNA (1995), in Pelotas, RS, estimated the sinanthropic index and the populational fluctuation of the species of Calliphoridae, registering the presence of 14 species, belonging to the genera *Cochliomyia*, *Chrysomya*, *Sarconesia*, *Lucilia*, *Calliphora*, *Hemilucilia*, *Paralucilia* and *Comptosomyiops*.

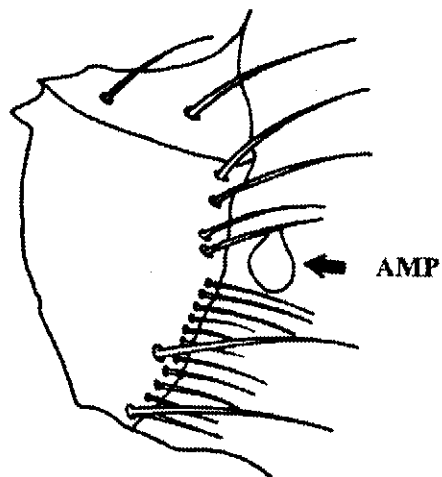
Key for genera of Calliphoridae of Southern Brazil (following the terminology of McALPINE (1981))

Posterior spiracle with a singular reniform flap, large, with dorsal opening (EMR); female without extensile ovipositor (Mesembrinellinae).....10



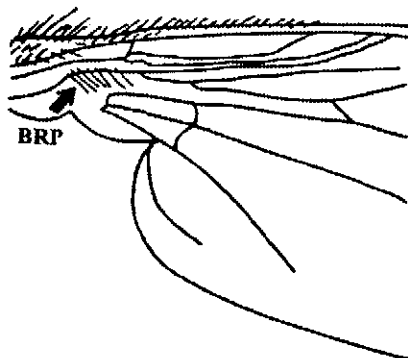
Posterior spiracle, with variable size and shape, with non-dorsal opening; extensile ovipositor.....2

2. Base of radius, in the dorsal face, bare; oval-shaped larger ampulla (AMP) (Calliphorinae).....4

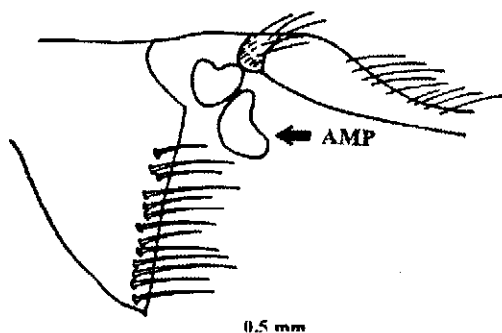


0,5 mm

Base of radius, in the dorsal face, hairy (BRP); reniform larger ampulla (AMP).....3

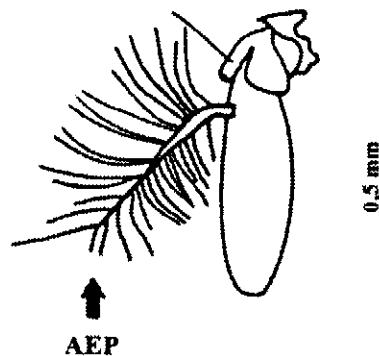


1 mm



0,5 mm

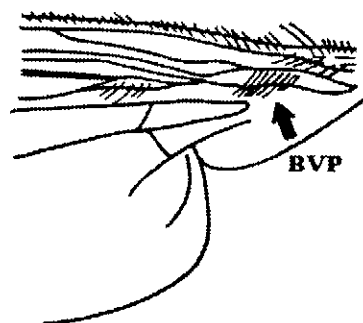
3. Base of radius, in the ventral face, bare; arista in the distal extremity, plumose (AEP); metallic thorax (Chrysomyinae).....5



0,5 mm

AEP

Base of radius, in the ventral face, hairy (BVP); arista with bare distal extremity; non-metallic thorax (Toxotarsinae).....*Sarconesia*

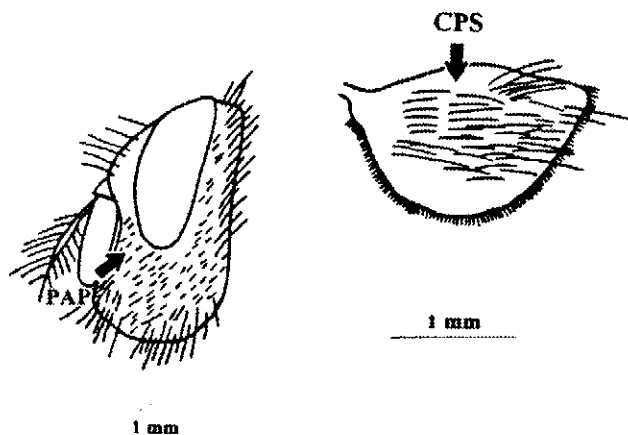


1 mm

BVP

4. Parafacialia, bare; inferior calyptra bare in the superior part..... *Lucilia*

Parafacialia, hairy (PAP); inferior calyptra hairy in the superior part..... *Calliphora*



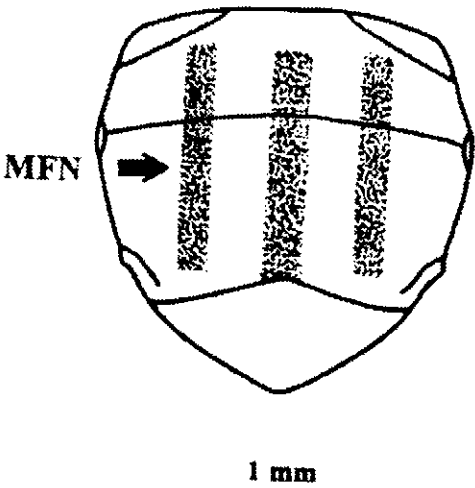
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CPS

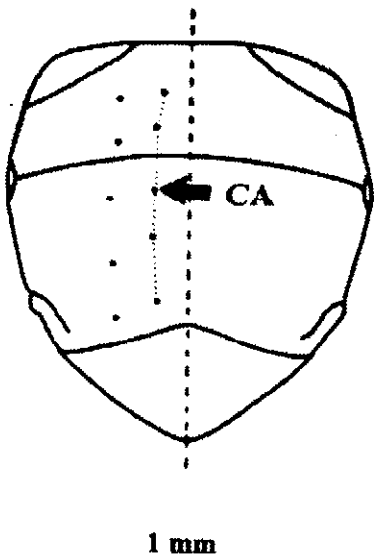
PAP

1 mm

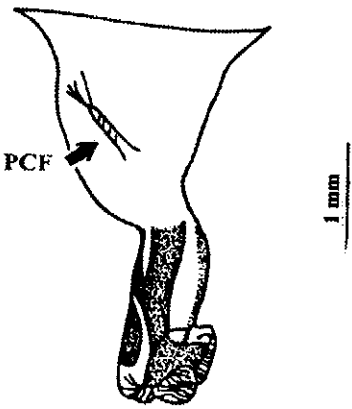
5. Mesonotum without sharp longitudinal black stripes.....6
Mesonotum with three sharp longitudinal black stripes.....8



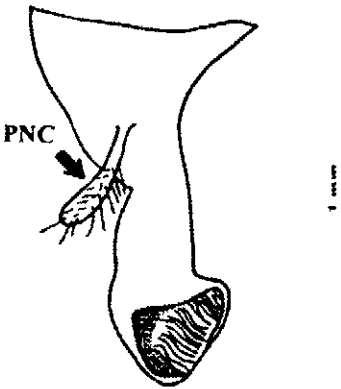
6. Abdominal tergites with transverse black stripes, in the posterior margin; hialine wing.....*Chrysomya*
Abdominal tergites without transverse black stripes; spotted wing.....7
7. Brown femur, with yellowish glow; acrostichal bristles (CA) (0+2); yellow anterior spiracle; yellow basicosta.....*Hemilucilia*
Dark brown femur; acrostichal bristles (CA) (0+1); whitish anterior spiracle; dark brown basicosta.....*Chloroprocta*



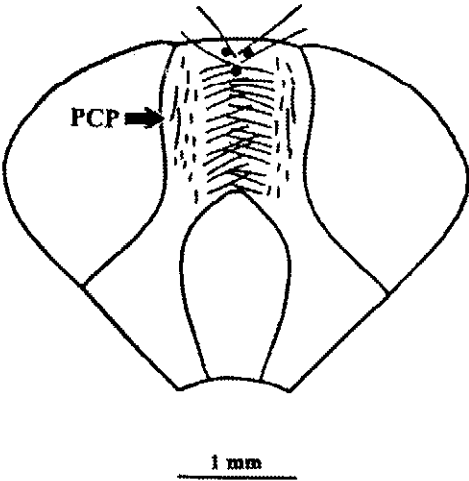
8. Short, filiform palpi (PCF).....*Cochlyomyia*



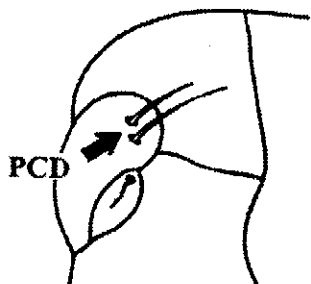
- Normal, clavate palpi (PNC).....9



9. Parafrontalia without proclinate bristles; antenna with dark brown flagellomere 1, approximately double the size of the pedicel.....*Compsomyiops*
Parafrontalia with two strong proclinate bristles (PCP); antenna with orange flagellomere 1, approximately three times the size of the pedicel..... *Paralucilia*

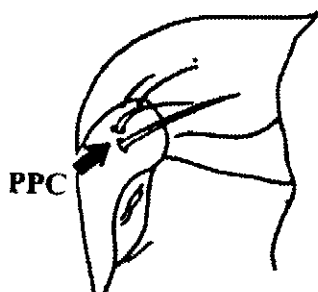


10. Post-pronotum with two distinct bristles (PCD).....11



1 mm

Post-pronotum with three distinct bristles (PPC).....*Mesembrinella*



1 mm

11. Fifth abdominal tergite with discal bristles.....*Huascaromusca*

Fifth abdominal tergite without discal bristles.....*Lanella*

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SUMÁRIO

Confeccionou-se uma chave pictórica para identificação dos gêneros de Calliphoridae que possuem espécies ocorrendo no Sul do Brasil e áreas adjacentes. Constatou-se

a presença de espécies pertencentes aos seguintes 12 gêneros: *Cochliomyia* Townsend, 1915; *Chrysomya* Robineau-Desvoidy, 1830; *Paralucilia* Brauer & Bergenstamm, 1891; *Hemilucilia* Brauer, 1895; *Comptosomyia* Townsend, 1918; *Chloroprocta* Wulp, 1896; *Sarconesia* Bigot, 1857; *Lucilia* Robineau-Desvoidy, 1830 [incluindo *Phaenicia* Robineau-Desvoidy, 1830]; *Calliphora* Robineau-Desvoidy, 1830; *Lancella* Mello, 1967; *Mesembrinella* Giglio-tos, 1893 e *Huascaromusca* Townsend, 1918

PALAVRAS-CHAVE: Calliphoridae, chave pictórica, Sul do Brasil.

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