

Keys from Forattini, Entomologia Medica, p. 194-208. Translated from Portuguese.

Subgenus CULEX

ADULTS:

- 1 - Wings with light-colored scales, variable in number, on base of costa and sometimes also on 1st longitudinal veins _____ 2
 Wings without light-colored scales, veins covered entirely with dark elements..9
- 2 - White scales reaching base of 4th vein _____ delys
 White scales not reaching base of 4th vein _____ 3
- 3 - Hindtarsi with broad, or at least well evident, light marking _____ 4
 Hindtarsi dark, without pale marking, or with narrow and hardly evident pale marking _____ 7
- 4 - Pleura with postspiracular scales _____ 5
 Pleura without postspricaular scales _____ maxi
- 5 - Proboscis with wide light-colored median annulus; abdominal tergites with bands or spots of light-colored scales at base _____ 6
 Proboscis with pale ventral scales not forming median pale annulus; abdominal tergites without distinct pale basal fasciae _____ tramazaguesi
- 6 - Outer surface of femora and tibiae with line or stripe comprised of pale scales which may attain basitarsus; mesonotum with pale scales forming pattern _____ tarsalis
 Outer surface of femora and tibiae without line or stripes of pale scales; mesonotum without pattern of pale scales _____ peus
- 7 - Pleura with Postspiracular scales _____ lahillei
 Pleura without postspiracular scales _____ 8
- 8 - Wing with pale scales at ends of 1st-3rd longitudinal veins _____ apicinus
 Wing without pale scales at ends of 1st-3rd longitudinal veins _____ lygrus
- 9 - Tarsi with broad or at least well evident pale marking sometimes attaining full length of 5th hindsegment _____ 10
 Tarsi dark, with at most restricted or hardly evident pale marking _____ 24

- 10 - 5th segment of hindtarsus with pale area attaining most of length of segment, sometimes wholly pale _____ 11
 5th segment of hindtarsus with pale marking not reaching midlength of segment or pale at both ends with median part dark _____ 13
- 11 - Proboscis covered with dark scales, or perhaps with pale elements on ventral surface not forming evident spots on lateral and dorsal surfaces of the part, at least in ♀ _____ pinarocampa
surinamensis
- Proboscis dark, but with distinct pale median area which may be restricted to ventral surface or form annulus _____ 12
- 12 - Abdominal sternites with triangular dark areas _____ thriambus
 Abdominal sternites with dark fasciae _____ stenolepis
- 13 - Postspiracular scales present _____ 14
 Postspiracular scales absent _____ 16
- 14 - Proboscis dark, with median pale area _____ 15
 Proboscis dark, without median pale area _____ secutor
- 15 - Abdominal tergites with evident pale basal fasciae; sternites with poorly defined pale and dark areas, scales of each color intermingled — bahamensis
 Abdominal tergites without evident pale basal fasciae, at least in ♀, with only reduced basolateral pale areas; sternites predominantly dark in triangular areas _____ renatoi
- 16 - Mesonotum covered with bronzy, ~~golden~~, dark, or pale scales along with white ones forming pattern generally consisting of 2 white median spots — 17
 Mesonotum covered with bronzy, golden, dark, or pale scales without pattern formed by white elements, presence of which is limited to anterolateral marginal areas, prescutellar depression, and scutellar lobes _____ 18
- 17 - Occiput with erect forked scales, all of dark color, _____ coronator
 Occiput with erect forked scales of pale and dark color, latter in anterior part of area _____ airozai
corniger

- 18 - Proboscis dark, with median pale area _____ 19
 Proboscis dark, without median pale area _____ 21
- 19 - Mesonotum covered with pale golden scales becoming whitish — saltanensis
 Mesonotum covered with golden, dark, or bronzy scales _____ 20
- 20 - Palpi of ♀ with white scales at tip _____ maracayensis
 Palpi of ♂ wholly dark _____ coronator
habilitator
- 21 - Abdominal tergites with pale basal spots _____ 22
 Abdominal tergites with pale basal fasciae _____ 23
- 22 - Abdominal sternites predominantly covered with dark scales _____ bidens
 Abdominal sternites predominantly covered with pale scales — mauesensis
- 23 - Abdominal sternites predominantly covered with **pale scales** — levicastilloi
 Abdominal sternites predominantly covered with dark scales _____
 _____ coronator complex
declarator
- 24 - Proboscis dark, with regularly delimited median ventral spot of pale
 scales which may extend onto sides _____ 25
 Proboscis dark, without median ventral spot of pale scales, or at most
 with a few pale elements in this position not forming an evident spot. _____ 27
- 25 - Mesonotum covered with dark scales, with white elements forming pattern
 _____ diplophyllum
interrogator
restuans
 Mesonotum covered with dark scales, white elements restricted, at most
 in marginal areas, prescutellar depression, and scutellar lobes, not forming
 pattern _____ 26
- 26 - Abdominal tergites with pale spots basad of which are fasciae of the same
 color _____ scimitar
 Abdominal tergites with basal pale fasciae _____ habilitator
pseudojanthinosoma
- 27 - Postspiracular scales present _____ chidesteri
 Postspiracular scales absent _____ 28

- 28 - Mesonotum with pattern of white scales _____ 29
 Mesonotum without pattern of white scales _____ 32
- 29 - Abdominal tergites dark, with only basolateral areas of pale scales not
 tending to form fasciae _____ 30
 Abdominal tergites dark, with ~~with~~ broad or narrow basal fasciae of pale
 scales _____ 31
- 30 - Prescutellar depression with dark scales _____ abnormalis
 Prescutellar depression with pale scales _____ foliaceus
- 31 - Mesonotal pattern formed essentially of 2 curved bands from margin to
 median region; mesonotal integument dark, almost black _____ carcinogenus
 Mesonotal pattern formed essentially by 2 median spots; integument
 chestnut brown _____ dolosus
- 32 - Abdominal tergites dark with basal bands or spots of pale scales _____ 33
 Abdominal tergites dark with onlt basolateral areas of pale scales which
 rarely form narrow bands _____ 39
- 33 - Abdominal tergites with pale basal bands _____ 34
 Abdominal tergites with pale basal spots _____ 38
- 34 - Abdominal sternites predominantly covered with pale scales _____ 35
 Abdominal sternites covered with dark and pale scales, dark scales in distal
 half and pale ones basally or dark elements predominating _____ 36
- 35 - Occiput with erect forked scales, pale and dark, former in anterior part
 of area; mesonotum covered with brilliant golden scales, integument reddish
 _____ erythrothorax
 Occiput with all erect forked scales dark; mesonotum covered with bronzy
 scales, integument chestnut brown _____ declarator
restuans
- 36 - Abdominal sternites predominantly covered with dark scales, _____ brethesi
laticlasper
 Abdominal sternites covered with pale and dark scales, each occupying
 half of segment _____ 37

- 37 - Occiput with decumbent scales pale _____ acharistus
 Occiput with decumbent scales pale and dark _____ nigripalpus
- 38 - Occiput with erect forked scales pale and dark, pale ones anterior; palpi of ♀ with some white scales at tip; abdominal sternites predominantly pale _____ pipiens
 Occiput with erect forked scales dark in all areas; palpi of ♀ dark, without white scales; abdominal sternites predominantly dark _____ bidens
- 39 - Abdominal sternites covered predominantly with pale scales _____ 40
 Abdominal sternites with equal parts of pale and dark scales or predominantly with dark scales _____ 42
 light
- 40 - Dark scales of abdominal segments ^{light} chestnut brown or yellow; occiput with decumbent pale and dark scales to such an extent that forked erect scales are wholly obliterated _____ salinarius
 Dark scales of abdominal segments darker chestnut brown; occiput with decumbent pale scales predominating or in entirety _____ 41
- 41 - Occiput with pale and dark erect forked scales _____ sphinx
 Occiput with dark forked erect scales _____ scimitar
- 42 - Palpi of ♀ with white scales at tip _____ spinus
 Palpi of ♀ wholly dark _____ 43
- 43 - Occiput with decumbent dark scales in large part or wholly, erect forked scales of same color _____ archegus
articularis
 Occiput with decumbent scales pale or intermixed with dark scales, erect forked scales dark or intermixed with pale ones _____ 44
- 44 - Occiput with erect forked scales pale and dark _____ brevispinosus
 Occiput with erect forked scales wholly dark _____ 45
- 45 - Abdominal sternites predominantly dark-scaled _____ bonneae
inflictus
 Abdominal sternites with pale and dark scales, pale ones in basal half and dark ones in distal half _____ 46

- 7 - Internal division of apical lobe of basistyle with setae a, b, and c present on apex of process in addition to basal setosity; outer division with group of falciform setae; distal part of basistyle with tuft of setae; apex of dististyle normal; ventral arm of mesosoma curved and smooth _____ bahamensis
- Internal division of apical lobe of basistyle formed by 2 projecting processes, with blunt seta at base of each; external division with one process and similar blunt seta, as well as 2 fine basal setae and one longer distal (h) seta; dististyle with quadrangular apex; ventral arm of mesosome indistinct _____ tramazayguesi
- 8 - Sternite 10 pilose to appreciable extent; ventral arm of mesosoma serrate apically _____ duplicator
- Sternite 10 glabrous; ventral arm of mesosoma smooth at tip _____ 9
- 9 - Ventral arm of mesosoma bent at right angle laterally and separated by some distance from ~~teeth~~ of median process _____ 10
- Ventral arm of mesosoma dentiform, sometimes differing little from teeth of median process and always contiguous with them and not bent laterally in right angle _____ 11
- 10 - Mesosoma with ventral arm rugose at level of curvature, median process with large teeth not combined to form projection, basal process developed _____ coronator complex
- Mesosoma with ventral arm smooth at level of curvature, median process with large teeth combining to form projection, basal process not developed _____ bonneae
- 11 - Apical lobe of basistyle, although indistinctly divided, in 2 divisions (inner and outer) because of different development of setae on each; inner one with 3 rather blunt setae and outer one with about 6 fine setae _____ 12
- Apical lobe of basistyle with projecting tubercle bearing equal setae _____ 13

- 12 - Ventral arm of mesosoma clavate, somewhat T-shaped; basal process curved and pointed _____ brevispinosus
 Ventral arm of mesosoma toothlike; basal process straight — surinamensis
- 13 - Ventral arm of mesosoma small and indistinguishable from teeth of median process; apex of basistyle with tuft of long setae _____ maxi
 Ventral arm of mesosoma large and clearly distinct from teeth of median process; apex of basistyle without tuft of long setae _____ oswaldoi
- 14 - Median process of mesosoma a rounded projection expanded in the manner of a mushroom cap _____ finlayi
 Median process of mesosoma otherwise _____ 15
- 15 - Apical lobe of basistyle with developed lamina triangular, depressed along upper margin and with tendency to roll up in the manner of a paper cone — 16
 Apical lobe of basistyle with lamina normal, of oval or lanceolate outline _____ 17
- 16 - Apical lobe of basistyle with setae a, b, and c present and blunt; setae d and e foliaceous _____ levicastilloi
 Apical lobe of basistyle lacking setae a, b, and c, replaced by group of spiniform setae on basal part of the lobe; setae d and e present, the former longer and dendriform at tip _____ apicinus
- 17 - Apical lobe of basistyle with seta f present and clearly differentiated from others _____ 18
 Apical lobe of basistyle ^{with seta f} absent, or if present, fine and difficultly differentiated from others near it _____ 46
- 18 - Apical lobe of basistyle with seta f curved at tip in special way reminiscent of the tip of a halberd _____ articularis
 Seta f different _____ 19
- 19 - Seta f in apical third triangularly expanded, slightly enrolled on its longitudinal axis _____ mauesensis
 Seta f with apical extremity strongly hooked ^{ed} or straight but always of more or less uniform thickness throughout its length _____ 20

- 20 - Apical lobe of basistyle with 2 setae d and e present and similar _____ 21
 Apical lobe of basistyle with setae d and e absent or only one of them
 present _____ 24
- 21 - Median process of mesosoma without teeth _____ pipiens
 Median process of mesosoma with variable number of teeth _____ 22
- 22 - Sternite 10 with apical tuft of setae spiniform centrally and spatulate
 outwardly _____ 23
 Sternite 10 with apical tuft of setae wholly spiniform _____ secutor
- 23 - Mesosoma with dorsal and ventral arms similar, both digitate, and median
 process with 5 or fewer robust teeth _____ tarsalis
 Mesosoma with dorsal arm laminar and ventral arm dentiform, entirely similar
 to numerous teeth of median process _____ abnormalis
- 24 - Apical lobe of basistyle with seta h foliaceous, almost of shape of leaf
 anterior to it _____ 25
 Seta h, when present, fine and simple _____ 26
- 25 - Tip of dististyle finely ringed _____ diplophyllum
 Tip of dististyle smooth _____ lahillei
- 26 - Ventral arm of mesosoma dilated T-wise _____ mollis
 Ventral arm of mesosoma curvo or dilated, but of different shape _____ 27
- 27 - Sternite 10 at apex with spatulate setae at outer side of tuft _____
 _____ chidesteri
 Sternite 10 with all setae of tuft spiniform _____ 28
- 28 - Ventral arm of mesosoma dilated, rounded, or curved, and with rugosity or
 spicules _____ 29
 Ventral arm of mesosoma curved, smooth and with tip pointed or blunt _____ 30
- 29 - Mesosoma with basal process protruding or well developed _____ peus
 Mesosoma without evident basal process _____ interrogator

- 40 - Median process of mesosoma with less than 5 distinct teeth _____ 41
 Median process with 5 or more distinct teeth _____ 42
- 41 - Median process with well developed teeth, larger than ventral arm, gently curved and convex; dorsal arm apically truncate and a little rugose; basal process straight and triangular; dististyle without striations in distal part _____ declarator
 Median process with poorly developed triangular teeth; dorsal arm with pointed tip; basal process digitiform and curved, pointed at tip; dististyle finely ringed distally _____ acharistus
- 42 - Mesosoma with basal process straight or gently curved and pointed _____ 43
 Mesosoma with basal process bent posteriorly at acute angle _____ 44
- 43 - Mesosoma with basal process somewhat blunt at tip _____ erythrothorax
 Mesosoma with basal process with sharply pointed tip and sometimes with small posteriorly directed accessory point _____ bickleyi
- 44 - Dorsal arm of mesosoma gradually tapering distally _____ 45
 Dorsal arm strongly dilated distally _____ alani
- 45 - Dorsal arm or mesosoma more or less uniformly tapered distally _____ spinosus
 Dorsal arm with constriction or curvature in middle of inner surface _____
 _____ salinarius
- 46 - Tip of sternite 10 with tuft of setae with outer ones spatulate and inner ones spiniform _____ 47
 Tip of sternite 10 with tuft of wholly spiniform setae, but of various development _____ 51
- 47 - Dististyle strongly dilated medially, strongly constricted distally in manner resembling a scimitar blade; distal end of this appendage finely annulate _____ scimitar
 Dististyle normal, without apical annulations _____ 48
- 48 - Apical lobe of basistyle distinctly divided _____ 49
 Apical lobe not or indistinctly divided _____ 50

LARVAE:

- 1 - Respiratory siphon short, not over 3x as long as basal width _____ 2
 Siphon of medium size or long, 4 or more times as long as basal width _____ 5
- 2 - Pecten attaining almost distal end of siphon, ventral face of which is strongly convex _____ bonneae
 Pecten attaining no more than middle of siphon, ventral face of which lacks strong curvature _____ 3
- 3 - Siphon strongly dilated medially and pecten formed only of a few basal elements (about 5) _____ pseudojanthinosoma
 Siphon not strongly dilated medially and pecten composed of larger number of elements _____ 4
- 4 - Antennal seta (11) fine, bifid, smooth _____ corniger
 Antennal seta (11) multiple, smooth _____ spinosus
- 5 - Siphon 4-5x as long as basal width _____ 6
 Siphon more than 5x as long as basal width _____ 22
- 6 - Postclypeal seta (4), developed, multiple and pinnate _____ 7
 Postclypeal seta (4), little developed, fine, simple or bifid, smooth _____ 9
- 7 - Inner preclypeal seta (1) simple and smooth _____ abnormalis
 Inner preclypeal seta (1) dilated, serrate, simple, or branched _____ 8
- 8 - Body surface spiculate _____ renatoi
 Body surface smooth _____ spinosus
- 9 - Surface of siphon spiculate _____ bahamensis
 Surface of siphon smooth _____ 10
- 10 - Body surface spiculate _____ 11
 Body surface smooth _____ 12
- 11 - Siphon with pecten surpassing setae of siphonal tuft _____ interrogator
 Siphon with pecten not reaching first setae siphonal tuft _____ declarator
- 12 - Siphonal tuft comprising no more than 3 setae _____ 13
 Siphonal tuft comprising 4 or more setae _____ 14

- 13 - Setae of siphonal tuft simple _____ thriambus
 Setae of siphonal tuft bifid or trifid _____ mollis
- 14 - All setae of siphonal tuft in line _____ tarsalis
 At least some setae of siphonal tuft not in line _____ 15
- 15 - Setae of siphonal tuft small, none attaining length equal to width of
 siphon _____ 16
 Setae of siphonal tuft at least as long as width of siphon _____ 17
- 16 - Siphon about 4x as long as basal width and slightly dilated medially;
 antennal seta (11) with about 10 pinnate branches _____ carcinoxenus
 Siphon about 5x as long as basal width and slightly infundibuliform,
 without median dilation; antennal seta (11) with larger number of pinnate
 branches _____ foliaceus
- 17 - Siphonal tuft comprising 3 setae _____ 18
 Siphonal tuft comprising 5 setae _____ 20
- 18 - All setae of siphonal tuft smooth _____ 19
 At least basal setae of siphonal tuft pinnate _____ pipiens
- 19 - Setae of siphonal tuft simple or bifid _____ restuans
 Setae of siphonal tuft trifid or with more branches _____ salinarius
- 20 - Setae of siphonal tuft bifid or trifid, 2 on lateral faces and one in
 distal area _____ stenolepis
 Setae of siphonal tuft, at least basal ones, multiplicate, 3 in line on
 ventral face and 2 out of line on distal part _____ 21
- 21 - Three basal setae of siphonal tuft multiplicate _____ peus
 3 basal siphonal setae with no more than 4-5 branches _____ salinarius
- 22 - Siphon with preapical spines _____ 23
 Siphon without preapical spines _____ 24
- 23 - Preapical spines of siphon strong and elongated; siphonal tuft comprising
 4 setae _____ coronator
 Preapical spines of siphon small and triangular; 3 setae in siphonal tuft
 _____ brevispinosus

- 24 - No more than 3 setae in siphonal tuft _____ 25
 At least 4 setae in siphonal tuft _____ 26
- 25 - Siphonal tuft with with 2 setae simple and close together near pecten,
 3rd simple or bifid and preapical _____ pinarocampa
 Setae of siphonal tuft bifid or trifid, unaligned in space between pecten
 and tip of siphon _____ inflictus
- 26 - Siphonal tuft with 8 or more setae, all in line _____ 27
 Siphonal tuft with 4-5 setae _____ 28
- 27 - Siphonal tuft starting basally among pectinal elements, which is close to
 base of siphon; median frontal seta (6) 3-branched; body of larva strongly
 spiculate _____ chidesteri
 Siphonal tuft starting beyond end of pecten; median frontal seta (6),
 multiplicate _____ secutor
- 28 - Setae of siphonal tuft mostly simple _____ nigripalpus
 Setae of siphonal tuft bifid or multiplicate _____ 29
- 29 - Body surface smooth _____ 30
 Body surface spiculate _____ surinamensis
- 30 - Setae of siphonal tuft in line; pecten generally with single basal tooth
 on each element _____ dolusus
 At least some of setae of siphonal tuft out or line _____ 31
- 31 - Siphonal tuft with 5 setae _____ erythrothorax
 Siphonal tuft with 4 setae _____ habilitator
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