Амурский зоологический журнал, 2026, т. XVIII, № 2
Amurian Zoological Journal, 2026, vol. XVIII, no. 2
www.azjournal.ru

https://www.doi.org/10.33910/2686-9519-2026-18-2-494-506
https://www.zoobank.org/References/4BB898FA-3042-4245-9740-943F5909B506

UDC 595.722

A key to the Mediterranean genera of predatory flies of the family Dolichopodidae (Diptera)

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Abstract. A key to 70 Mediterranean genera of predatory long-legged flies (Dolichopodidae including Microphorinae and Parathalassiinae) is compiled for the first time. Comparing this key with the 2007 Key to East Mediterranean genera of Dolichopodidae, 20 genera are added and three genera (placed recently in synonymy with two other genera) are removed. The following five genera of former Microphoridae are included: *Microphor* Macquart, *Schistostoma* Becker (Microphorinae), *Eothalassius* Shamshev et Grootaert, *Microphorella* Becker, and *Parathalassius* Mik (Parathalassiinae). Five mainly tropical genera have been recently discovered in the Mediterranean region and also included in the key: *Amblypsilopus* Bigot, *Chaetogonopteron* De Meijere, *Corindia* Bickel, *Nepalomyia* Hollis, and *Shamshevia* Grichanov. Nine genera are conditional endemics (or nearly so) of the Mediterranean region: *Anahydrophorus* Becker, *Cyrturella* Collin, *Epithalassius* Mik, *Eucoryphus* Mik, *Guzeriplia* Negrobov, *Machaerium* Haliday, *Ortochile* Latreille, *Platyopsis* Parent, and *Rhynchoschizus* Dyte. The monotypic *Falbouria* Dyte is known only from the Azores archipelago. The monotypic *Teneriffa* Becker is reported from the Canary Islands and the Madeira archipelago.

Keywords: long-legged flies, Palaearctic, Mediterranean basin, identification key, checklist

Определитель родов хищных мух-зеленушек Средиземноморской области (Diptera: Dolichopodidae)

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Аннотация. Впервые составлен ключ к определению 70 средиземноморских родов хищных мух-зеленушек (Dolichopodidae, включая Microphorinae и Parathalassiinae). По сравнению с определителем восточносредиземноморских родов Dolichopodidae (2007), добавлены 20 родов и исключены три рода. Впервые вставлены пять родов бывшего семейства Microphoridae: *Microphor* Macquart, *Schistostoma* Becker (Microphorinae), *Eothalassius* Shamshev et Grootaert, *Microphorella* Becker и *Parathalassius* Mik (Parathalassiinae). Пять преимущественно тропических родов были недавно обнаружены в средиземноморском регионе, и они также включены в новый определитель: *Amblypsilopus* Bigot, *Chaetogonopteron* De Meijere, *Corindia* Bickel, *Nepalomyia* Hollis и *Shamshevia* Grichanov. Девять родов являются условными эндемиками (или почти эндемиками) средиземноморского региона. Монотипический род *Falbouria* Dyte известен только с Азорского архипелага. Монотипический род *Teneriffa* Becker отмечен с Канарских островов и архипелага Мадейра.

Ключевые слова: мухи-зеленушки, Палеарктика, Средиземноморье, определитель, справочный список

Introduction

The Mediterranean region (or Mediterranea), is the biogeographical region of lands around the Mediterranean Sea within Palaearctic that mostly have a Mediterranean climate, with mild to cool, rainy winters and warm to hot, dry summers. It is occupied mainly with the Mediterranean forests, woodlands and scrub biome, which includes a number of various ecoregions (Ecoregions 2017). Researchers from the countries of the Mediterranean basin (European states, Russia, Egypt, Israel, Morocco, Türkiye, etc.) are active in studying the local dipterofaunas. Regarding Dolichopodidae, a contemporary key for the identification of Mediterranean genera does not exist. The famous 'Faune de France' (Parent 1938) is largely outdated, but still in use. Grichanov (Grichanov 2007) has compiled a key to East Mediterranean genera and species of long-legged flies, which does not embrace the whole Mediterranean fauna in respect to subsequent findings and taxonomic changes.

This paper aims to compile a new key to all 70 Mediterranean genera of long-legged flies (Dolichopodidae including Microphorinae and Parathalassiinae). The text and character selection for this key is modified from Grichanov (Grichanov 2007), Grichanov et al. (Grichanov et al. 2011a), and Grichanov, Brooks (Grichanov, Brooks 2017). Morphological terminology and abbreviations follow Grichanov, Brooks (Grichanov, Brooks 2017). The illustrations for representatives of almost all Mediterranean genera can be found in open sources (Grichanov et al. 2011a, 2011b; Grichanov, Brooks 2017; Sinclair et al. 2023). The Diptera.info (Diptera.info 2026) Internet resource contains a lot of colour photographs of dolichopodids including living creatures, identified and approved by the professional dipterists. This site is highly recommended for checking the results of the use of a key provided below.

Key to Mediterranean genera of Dolichopodidae

1. Wing with *bm–m* crossvein; cell *dm* emitting 3 branches to wing margin (*i.e.*, veins *M1*, *M2*, *M4*); costal vein (*C*) running around wing margin; body black in ground colour, with greyish pruinosity, or whitish pruinose 2
– Wing without *bm–m* crossvein (cells *bm* and *dm* confluent); cell *bm+dm* emitting 2 veins (*M1* and *M4*), vein *M1* sometimes branched, or with stump-like vein *M2* at middle of distal section; costal vein (*C*) usually ending at vein *M1* (sometimes at tip of vein *R2+3*); body generally metallic, or yellow, rarely greyish 6
2. Arista-like stylus bisegmented; eyes bare; male eyes contiguous on frons (Microphorinae) 3
– Arista-like stylus one-segmented; eyes pubescent; male eyes broadly separated on frons (Parathalassiinae) 4
3. Face flat, somewhat concave; 6 to 10 scutellar bristles . . . . . *Microphor* Macquart
– Face with deep emargination below; usually 2 or 4 scutellar bristles . . . . . *Schistostoma* Becker
4. Vein *R1* short, ending before middle of wing; palpus large and flattened; antennal stylus lengthened, at least 4 times longer than postpedicel; male epandrium and hypandrium partially fused together . . . . . *Eothalassius* Shamshev et Grootaert
– Vein *R1* long, ending at middle of wing; palpus small; antennal stylus not lengthened; male epandrium and hypandrium separate with margins defined 5
5. Cubital cell (*cua*) truncate; 4 or 6 scutellar bristles; body and legs silvery grey with pale setae . . . . . *Parathalassius* Mik
– Cubital cell (*cua*) rounded; 2 scutellar bristles; body and legs dull grey or brownish, with mostly dark setae . . . . . *Microphorella* Becker
6. Vertex of head strongly excavated on either side of ocellar tubercle; wing vein *M1+2* distinctly branched, with vein *M2* present at least as a fold in membrane (Sciapodinae) 7
– Vertex of head usually not excavated on either side of ocellar tubercle; wing vein *M1+2* unbranched, or with vein *M2* present only as short stump vein 8

7. Mid and/or hind femora each with distinct anterior preapical seta; female fore femur usually with strong basoventral setae ... . *Sciapus* Zeller
– Femora without distinct anterior preapical seta; female fore femur rarely with strong basoventral setae .... *Amblypsilopus* Bigot
8. Wing with costal vein (*C*) ending at vein *R4+5*; vein *M1+2* discontinuous and weakened, with distal section often displaced (Diaphorinae [in part]) 9
– Wing with costal vein (*C*) extending beyond vein *R4+5* and usually ending at vein *M1+2*, or sometimes ending between veins *R4+5* and *M1+2*; vein *M1+2* continuous and usually strong 10
9. Thorax with acrostichal setae; male terminalia with sternite 8 with strong projecting setae ..... *Asyndetus* Loew
– Thorax without acrostichal setae, or microscopic; male terminalia with sternite 8 usually without strong setae .... *Cryptophleps* Lichtwardt
10. Antennal scape with setae on dorsal surface; thorax with posterior mesonotum not flattened; mid and hind femora each with strong anterior preapical seta; all tibiae with strong setae; male terminalia with hypopygium usually large, supported on a well-developed peduncle-like segment 7 and projecting forward beneath preabdomen (Dolichopodinae) 11
– Antennal scape usually bare (*Anepsiomyia* Bezzi, some *Argyra* Macquart, *Diostracus* Loew and *Syntormon* Loew spp. with setae on dorsal surface of scape, but mid and hind femora without strong anterior preapical seta, hypopygium sessile); other features variable 22
11. Hind basitarsus with at least 1, usually 2–3 strong setae above 12
– Hind basitarsus without setae above, or if bearing 1–2 feeble dorsal setae on hind basitarsus (a few species of *Poecilobothrus* and *Hercostomus*), then pleura bare in front of posterior spiracle, and *M1+2* not sigmatoid, weakly curved in distal part).. 13
12. Pleura with cluster of fine hairs in front of posterior spiracle; *M1+2* sigmatoid at middle of distal part, sometimes with a stump vein *M2*; *R4+5* and *M1+2* subparallel beyond bend in *M*; epandrium elongated, at base higher than at apex; arista-like stylus pubescent ..... *Dolichopus* Latreille
– Pleura bare in front of posterior spiracle; *M1+2* strongly curved towards *R4+5* at basal third of apical part; epandrium subquadrate; arista-like stylus plumose .... *Poecilobothrus* Mik (in part)
13. Several strong anterodorsal setae in apical half of the hind femur in addition to the true anterior preapical bristle; face narrowed under antennae and somewhat widened towards clypeus; wing vein *M1+2* usually with gentle curvation before the middle of distal part, then running towards *R4+5* and reaching costa far before the tip of wing; arista-like stylus short and bare; postpedicel usually short and suboval ..... *Tachytrechus* Haliday
– Hind femur usually with one, rarely with 2 true anterior preapical bristles; face regularly narrowed towards clypeus or parallel-sided; wing vein *M1+2* with curvation beyond the middle of distal part or *M1+2* and reaching costa near the tip of wing; stylus often pubescent; postpedicel usually subtriangular, asymmetric 14
14. Pleura with cluster of fine hairs in front of posterior spiracle 15
– Pleura bare in front of posterior spiracle ... .16
15. Fore tibia lacking anterodorsal comb-like row of strong spine-like setae, with 1–3 strong posteroventral setae; male fore tibia with long apicoventral seta; clypeus usually strongly bulging and proboscis greatly enlarged and strongly projecting (especially in females) .... *Ethiromyia* Brooks et Wheeler
– Fore tibia usually with anterodorsal comb-like row of strong spine-like setae, usually lacking strong posteroventral setae; male fore tibia lacking long apicoventral seta; clypeus usually flat to weakly produced, sometimes strongly produced in female,

 https://www.doi.org/10.33910/2686-9519-2026-18-2-494-506

proboscis not enlarged and strongly projecting . . . . . *Gymnopternus* Loew

16. Seven dorsocentrals; veins *R4+5* and *M1+2* subparallel and sinuous beyond crossvein *dm-m*; male wing with pronounced convex curve in *R4+5* and *M1+2* and darkened apex; surface setae on mid and hind femora well-developed, nearly as strong as preapical bristles; upper and lower propleuron with long dense hairs; prothoracic seta pale or brown . . . . . *Muscidideicus* Becker

– Five or six dorsocentrals; veins *R4+5* and *M1+2* subparallel or convergent beyond crossvein *dm-m*; *M1+2* straight or with anterior bend; surface setae on femora usually weak; or if strong, then vein *M1+2* with strong anterior bend and convergent with *R4+5*; prothoracic seta usually black 17

17. Proboscis and palps elongated and often slender, proboscis at least as long as head is high; vein *M1+2* beyond crossvein *dm-m* with weak anterior bend before middle, convergent with *R4+5* and ending well above wing apex, close to apex of *R4+5*; basal segment of fore tarsus usually with 3–4 distinct ventral setae . . . . . *Ortochile* Latreille

– Proboscis thick and short, not exceeding height of head; palps usually short; if long, then relatively broad; *M1+2* straight or with anterior bend; *R4+5* and *M1+2* subparallel or convergent 18

18. Body non-metallic; thorax pale-grey to dark grey or blackish with whitish-grey pollen; antennal stylus dorsal to apical, bare; 6 dorsocentrals, fifth pair usually strongly offset medially; vein *M1+2* beyond crossvein *dm-m* usually with strong anterior bend and strongly convergent with *R4+5*; *dm-m* located at about half wing length; abdomen yellowish brown; hind basitarsus of male with elongated comma-shaped posterobasal projection; male genitalia with proctiger brushes absent; female oviscapt usually with a pair of rod-like strong ventral lobes, exposed, if projections reduced, then setae of body and legs pale . . . . . *Argyrochlamys* Lamb

– Body usually metallic, dark; 5–6 dorsocentrals, penultimate posterior pair usually in line or weakly offset medially; venation variable, but *dm-m* located at about half wing length; hind basitarsus of male without comma-shaped posterobasal projection; female oviscapt usually hidden, simple 19

19. Hind femur with 2 or more anterodorsal preapical bristles; clypeus strongly bulging, subequal in height to face, with lower margin straight, ending well above lower eye margin; face and clypeus broad in both sexes, weakly converging below; palps large; proboscis large and thick; mid femur with 2–4 anterior and 2 strong posteroventral preapical bristles in addition to terminal posteroventral preapical bristle that is weakly developed; scutum with violet longitudinal stripe along each row of dorsocentrals. . . . . *Platyopsis* Parent

– Hind femur with 1 anterior or anterodorsal preapical bristle; clypeus flat, at most weakly produced in some females, with lower margin rounded or straight; palps and proboscis usually not enlarged; mid femur with 1 anterior and weak posteroventral preapical bristles 20

20. Thorax with distinct dark spot above notopleuron; wing vein *M1+2* irregularly sinuate, often with subapical flexion; wing distinctly darkened in anterior half along major veins; one strong posterior to posteroventral preapical bristle on mid femur; hypandrium short conical, fused to epandrium laterally . . . . . *Poecilobothrus* Mik (in part)

– Thorax lacking distinct dark spot above notopleuron; wing vein *M1+2* regularly sinuate, though sometimes weakly; wing rarely darkened in anterior half; mid femur with 1 strong posterior preapical about even with anterior preapical; hypandrium usually free, basoventral, complex, rarely simple (females are poorly distinguished) 21

21. Wing vein *M1+2* with flexion at middle of distal part, and sometimes strongly sinuate in males; male antennal pedicel

more or less reduced; arista-like stylus often with one or more lamellae; epandrial lobe well developed, sometimes greatly elongated and setose; hypandrium usually free, basoventral, simple or complex ..... *Sybistroma* Meigen

– Wing vein *M1+2* with flexion at basal third or at middle of distal part; antennal pedicel normal; arista-like stylus simple; epandrial lobe either reduced to 1–2 long setae or moderately developed; basoventral epandrial lobes and hypandrium forming a complex of entangled asymmetrical lobes ..... *Hercostomus* Loew

22. Labellum hook-shaped in lateral view, with long recurved, generally protruding hypopharynx; palpus large and triangular (Hydrophorinae [in part]) 23

– Labellum normal in lateral view, not hook-shaped, hypopharynx not recurved and protruding; palpus variable 24

23. Antennal postpedicel rounded basally, with narrow conical apex and apical arista-like stylus; fore tibia at apex with distinct erect spine-like seta; male hind tarsomere 1 simple, without strong setae ..... *Aphrosylus* Haliday

– Antennal postpedicel globular basally, with short conoid apex; arista-like stylus dorsal; fore tibia without spine-like seta at apex; male hind tarsomere 1 curved, with strong setae ..... *Teneriffa* Becker

24. Thorax with proepimeron with ventral digitiform projection behind base of fore coxa; males and often females with wing venation distorted and wing tip modified; large gangly flies (Hydrophorinae [in part]) ..... *Liancalus* Loew

– Thorax with proepimeron lacking ventral digitiform projection behind base of fore coxa; other characters various 25

25. Wing vein *M1+2* with two right angle bends in male, moderately sinuous in female; *dm–m* crossvein longer than apical part of vein *M4*; thorax with 7 strong dorsocentral setae; posterior mesonotum flattened immediately anterior to scutellum; mid and hind femora each with strong anterior preapical seta; antenna with dorsal arista-like stylus; large gangly flies (Hydrophorinae [in part]) ..... *Orthoceratium* Schrank

– Wing vein *M1+2* without two right angle bends in male; other characters various 26

26. Thorax with posterior mesonotum distinctly flattened and slightly depressed, from 1/3–1/2 of surface between dorsocentral setae and distinct from curved anterior mesonotum (note: the mesonotal depression may be bulged outwards and obscured in specimens that have been critically point-dried) 27

– Thorax with posterior mesonotum not flattened, or at most, only slightly, or apparently flattened immediately anterior to scutellum 45

27. *R4+5* and *M1+2* slightly to distinctly divergent; anal vein absent; body without metallic shine or weakly shining (Achalcinae) 28

– *R4+5* and *M1+2* not divergent; other features variable 29

28. Thorax with 6 dorsocentrals; fore tibia without basodorsal bristle; hind tibia with only 2 anterodorsal bristles; 6 abdominal segments; hypopygium with epandrial setae at base of epandrial lobe; dark species with globular thorax and distinctly darkened wings ..... *Australachalcus* Pollet

– Thorax with 5 dorsocentrals; fore tibia with 1 dorsal bristle at about basal 1/4; hind tibia in most species with 3 anterodorsal bristles; fore femur with erect ventral bristle on basal 1/5-1/3, about as long as femur is deep; 5 abdominal segments; hypopygium with epandrial setae on shaft of epandrial lobe; yellow or dark brown species ..... *Achalcus* Loew

29. Mid and/or hind femora with distinct anterior, or anterodorsal preapical seta; wing veins *R4+5* and *M1+2* subparallel (Pelo-ropeodinae) 30

– Mid and hind femora bare of major anterior preapical seta; wing veins *R4+5* and *M1+2* various 35

30. Body mostly light green, metallic shining; head and thorax with yellow bristles ... 31

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– Body never light green, often yellow-brown to black, with dark setae 32
31. Acrostichal setae biseriate; hypopygium large and free, green; female abdomen entirely green ..... *Guzeriplia* Negrobov
– Acrostichal setae absent or uniseriate; hypopygium small, partly enclosed into abdomen; female usually having some yellow abdominal tergites .... *Chrysotimus* Loew
32. Thorax without acrostichal setae; scutellum with single pair of setae; male terminalia sessile ..... *Micromorphus* Mik
– Thorax with acrostichal setae, although sometimes small; other characters various 33
33. Crossvein *dm-m* located close to base; hypopygium with cercus long, longer than surstylus ..... *Vetimicrotes* Dyte
– Crossvein *dm-m* located at about half wing length; hypopygium with cercus short, shorter than surstylus 34
34. Antennal arista-like stylus dorsal; male claws asymmetrical on fore tarsus; male mid coxa usually with apical spine of glued setae ..... *Peloropeodes* Wheeler
– Antennal arista-like stylus apical, or subapical, inserted in notch of postpedicel; male claws symmetrical on fore tarsus; male mid coxa without apical spine of glued setae ..... *Nepalomyia* Hollis
35. Body and legs clothed in dense grey tomentum, usually obscuring cuticle; antennal postpedicel with apical arista-like stylus; head with postorbital setae strong, in single row dorsally, but as field of fine, pale setulae across ventral postcranium; antennal postpedicel with distinct transverse ridge, appearing bisegmented, apical portion beyond ridge subtriangular; male terminalia with hypopygium with bilobate cercus; found on marine coasts (Hydrophorinae [in part]) ..... *Epithalassius* Mik
– Body tomentum usually not dense with underlying cuticle visible; other characters various..... 36
36. Antennal arista-like stylus usually dorsal; head with face with dense tomentosity; wing vein *M1+2* distinctly sinuate at middle of distal part, with pronounced flexion in membrane (*Neurigona*) or with indistinct sinuation (*Oncopygius*); hind tarsomere 1 usually longer than tarsomere 2; male abdominal segments 4 and/or 5 sometimes with ventral modifications; male terminalia with hypopygium usually globular, on peduncle formed by short segment 7 and sometimes enfolded by preceding abdominal segments (*Neurigona*) or with segment 7 long and setose (*Oncopygius*) (Neurigoninae) 37
– Antennal arista-like stylus usually apical, sometimes subapical, dorsal, or basodorsal; head with face often metallic; wing vein *M1+2* various; hind tarsomere 1 usually much shorter than tarsomere 2; male abdominal segments 4 and 5 usually unmodified; male terminalia with hypopygium pedunculate, sessile, or encapsulated 38
37. Acrostichal setae more or less distinctly uniseriate; wing vein *M1+2* with indistinct sinuation; male abdominal segment 7 long and setose; hypopygium with narrow surstyli and long and narrow cercus ..... *Oncopygius* Mik
– Acrostichals distinctly biseriate, even though sometimes small; wing vein *M1+2* with usually distinct sinuation; male abdominal segment 7 reduced; hypopygium with broad surstyli and short cercus ..... *Neurigona* Rondani
38. Male antennal scape with long, pointed ventral process; antennal pedicel with long apical condyle or conus projecting into postpedicel; male postpedicel long and flat with pointed apex, arista-like stylus basodorsal with basal article longer than apical article; wing with *dm–m* crossvein weak, located near wing base (Diaphorinae [in part]) ..... *Shamshevia* Grichanov
– Antenna not as above, arista-like stylus usually apical, sometimes subapical, or dorsal; wing with *dm–m* crossvein well-developed, located well distal to wing base 39
39. *R2+3* and *M1+2* nearly straight and parallel behind *dm-m*; dorsal postcranium fee-

bly concave; thorax and/or abdomen clear yellow, with or without dark spots dorsally; male segment 7 short (Xanthochlorinae) ..... *Xanthochlorus* Loew

– *R2+3* and *M1+2* distinctly curved and usually convergent behind *dm-m*; dorsal postcranium distinctly concave; body usually dark coloured, rarely mostly orange or yellow-brown; male segment 7 usually well-developed (Medeterinae) 40

40. *R4+5* and *M1+2* subapically bowed; distal section of *R4+5* and *M1+2* with flexion; posterior pair of acrostichals distinctly larger than preceding pair and offset laterally; usually 6 strong dorsocentrals; antenna sexually dimorphic; male postpedicel elongated; male abdominal segment 7 with tergite and sternite distinct; female tergites 9+10 divided medially into 2 hemitergites, each bearing a row of 4 spines ..... *Systenus* Loew

– *R4+5* and *M1+2* subparallel or convergent with *M* usually arched anteriorly; *M1+2* without flexion; acrostichals absent or aligned in two rows; usually 5 or fewer dorsocentrals; antenna usually similar in male and female; male postpedicel usually short, rounded or subtriangular; male abdominal segment 7 with tergite and sternite fused or sternite greatly reduced; female hemitergites usually without spines 41

41. *R4+5* and *M1+2* behind mid wing parallel to apex; acrostichal setae present; hind coxa with 2 lateral setae; body coloration usually bright metallic green 42

– *R4+5* and *M1+2* convergent, at most subparallel at apex; if those veins parallel behind mid wing to apex, then acrostichal setae absent or hind coxa with one lateral seta; body coloration usually dark 43

42. Female terminalia with ovipositor blade-like, sclerotised and narrow; male terminalia with surstylus strongly deflexed dorsad, usually lying conformably with similarly deflexed, oblong-shaped cercus .... *Thrypticus* Gerstaecker

– Female terminalia with ovipositor soft; male terminalia with surstylus and cercus usually not deflexed dorsad ... *Corindia* Bickel

43. Legs entirely devoid of strong setae; hind basitarsus nearly as long as next segment; body size less than 1.5 mm ....*Cyrturella* Collin

– At least mid tibia with some strong setae; rarely only short apicals present; hind basitarsus usually much shorter than next segment; body size usually larger than 1.5 mm 44

44. Fore coxa with long anteroapical spine- or hook-like cluster of setae, shorter in females; at least fore and hind coxae yellow; male fore tarsomeres 1 and 3 usually modified, with remarkable apical setae or processes, rarely simple, but with slightly thickened tarsomeres 1–4; body usually shining, weakly pollinose; *R4+5* and *M1+2* weakly convergent, almost subparallel ..... *Dolichophorus* Lichtwardt

– Fore coxa with short anteroapical setae not forming spine or hook; all coxae dark or only fore coxa yellow, rarely fore and hind coxae yellow; male fore tarsus differently modified or simple; body rarely shining ..... *Medetera* Fischer von Waldheim

45. Head with pair of large postvertical setae usually present on dorsal postcranium, out of line with postorbital series; postorbital setae strong, in single row dorsally, but as field of fine, pale setulae across ventral postcranium; male face usually wide; fronto-clypeal suture distinct, at least laterally; clypeus usually produced anteriorly; mouthparts with palpus usually large in both sexes and clothed in short setae; eye pubescent; wing with crossvein *dm–m* longer, or shorter, than distal section of vein *M4*; abdomen often dorsoventrally flattened; male terminalia with hypopygium encapsulated at abdominal apex (Hydrophorinae [in part]) 46

– Head with postvertical setae, if present, usually near vertex and in line with postorbital series; postorbital setae usually as distinct row of setae on lower postcranium, even if pale coloured; male face often narrow with fronto-clypeal suture obscured; mouthparts with palpus usually small, although sometimes enlarged in males only; wing

 https://www.doi.org/10.33910/2686-9519-2026-18-2-494-506

with *dm–m* crossvein usually shorter than distal section of vein *M4*; abdomen usually ovate, rarely dorsoventrally flattened; other characters various 57

46. Postpedicel usually globular at base, elongated, with drawn-out or conical apex, with apical, rarely subapical arista-like stylus; vertical (fronto-orbital) setae present; posterior mesonotum usually flattened in posterior quarter, but flattened area with weak margin; palps often enlarged 47

– Postpedicel usually short, not much longer than high, laterally flattened, with rounded apex; arista-like stylus usually dorsal, rarely subapical; verticals often short or absent; posterior mesonotum usually not flattened; palps various 50

47. Acrostichal setae absent; wing crossvein *dm-m* located far behind level of *R1* . . . 48

– Acrostichal setae present; *dm-m* located usually right behind level of *R1* 49

48. Proboscis long, about as long as head height (male) or half as long as head height (female); small species, about 2.5 mm long . . . . . *Coracocephalus* Mik (in part)

– Proboscis usually shorter, than head height; large species, more than 4 mm long . . . . . *Diostracus* Loew (in part)

49. Antennal postpedicel about as long as high; pedicel with inner projection; *R4+5* and *M1+2* nearly straight and parallel; crossvein *dm-m* longer than distal section of *M4* vein . . . . . *Rhynchoschizus* Dyte

– Antennal postpedicel longer than high; pedicel without inner projection; *R4+5* and *M1+2* distinctly convergent; *dm-m* not longer than distal section of *M4* vein . . . . . *Machaerium* Haliday

50. Face narrow, not wider than ocellar tubercle; acrostichal setae uniseriate at least in anterior part; scutellum with 1 pair of strong bristles; posterior crossvein *dm-m* shorter than distal part of *M4*; hypopygium globular, free, with long undivided surstylus . . . . . *Peodes* Loew

– Face wider than ocellar tubercle; other features various 51

51. Acrostichal setae absent 52

– Acrostichal setae present 55

52. Proboscis long, about as long as head height (male) or half as long as head height (female) . . . . *Coracocephalus* Mik (in part)

– Proboscis shorter, than head height (male) or shorter than half head height (female) 53

53. Antennal postpedicel with two long processes (male) or with distinct distal excision (female) . . . . . *Eucoryphus* Mik

– Antennal postpedicel rounded or oval 54

54. Antennal pedicel forming a more or less distinct projection into postpedicel; distal part of *M4* longer than *dm-m* . . . . . *Thinophilus* Wahlberg

– Antennal pedicel simple, without projection; distal part of *M4* shorter than *dm-m* . . . . . *Diostracus* Loew (in part)

55. Fore femur not thickened, without strong ventral bristles or spines; thorax with 1 pair of dorsocentral setae on mesonotum . . . . . *Anahydrophorus* Becker

– Fore femur thickened, ventrally with strong bristles and spines; thorax with several strong dorsocentral setae on mesonotum 56

56. Antennal postpedicel without apicoventral incision; male abdomen behind segment 4 with long remarkable appendices . . . . . *Scellus* Loew

– Antennal postpedicel with apicoventral incision; male abdomen behind segment 4 without long remarkable appendices . . . . . *Hydrophorus* Fallén

57. Antennal postpedicel triangular, usually much longer than basal width; arista-like stylus strictly apical; wing veins *M1+2* and *R4+5* often slightly bowed in respect to each other; male terminalia with hypopygium distinctive, surstylus large with apex structurally complex and multilobate, cercus often elongate (Rhaphiinae) . . . . . *Rhaphium* Meigen

– Antennal postpedicel not as above; arista-like stylus basodorsal to subapical, or inserted in apical incision; if arista-like stylus apical (*i.e.*, some *Syntormon* spp.), then antennal pedicel forming a thumb-like pro-

jection or conus into postpedicel on inside face; male terminalia not as above, surstylus comprised of 1 or 2 relatively simple lobes; other characters various 58

58. Head usually ovate in anterior view, higher than wide; antenna usually set high on head, *ca* 0.25 height from vertex; mid and/or hind femora with distinct anterior preapical seta; fore tibia often with anterodorsal comb-like row of short setae on distal 1/2; lateral seta of hind coxa usually near middle; wing with anal angle often reduced, or lost (Sympycninae) 59

– Head rounder in anterior view, about as high as wide; antenna position variable, closer to middle of head (0.3–0.5 height from vertex); mid and hind femora without anterior preapical seta, or such apparent preapical setae weak, or indistinct from background field of setae; fore tibia without anterodorsal comb-like row of short setae on distal 1/2; lateral seta of hind coxa near middle, or in basal 1/4; wing with anal angle variable, sometimes well-developed 66

59. Pedicel, viewed on inside face, forming more or less long, thumb-like projection or conus into postpedicel; antennal scape often with setulae above; arista-like stylus apical, or subapical; female face bulging, in lateral view projecting beyond curvature of eye; thorax with anepimeron anterior to posterior spiracle and/or metepimeron with fine pale setulae . . . *Syntormon* Loew

– Pedicel simple, vase-like, or globular, without thumb-like projection; antennal scape bare above (but setose in *Anepsiomyia*); arista-like stylus often distinctly dorsal; female face usually not bulging, conforming with curvature of eyes; thorax with anepimeron and metepimeron usually bare (metepimeron of *Campsicnemus* with fine setulae) 60

60. Antennal scape with hairs above; postpedicel more than twice as long as high, with almost basal arista-like stylus; fore femur and tibia finely spinose beneath . . . . . *Anepsiomyia* Bezzi

– Antennal scape bare above; postpedicel usually shorter, with dorsal arista-like stylus; fore femur and tibia rarely spinose beneath 61

61. Head with face in both sexes narrowest near middle; thorax with metepimeron with fine setulae; fore tibia without anterodorsal row of short setae on distal 1/2; male fore and/or mid leg often strongly modified; abdomen broad, dorsoventrally flattened, often short . . . . . *Campsicnemus* Haliday

– Head with face in both sexes parallel-sided, or gradually narrowed ventrally; thorax with metepimeron bare; abdomen usually cylindrical; other characters various . . . 62

62. Thorax with mesonotum with large matt-brown, or velvety black area above wing base; male tarsi unmodified . . . . . *Lamprochromus* Mik

– Thorax with mesonotum without matt-brown, or velvety black area above wing base; male tarsi often ornamented 63

63. Female head with clypeus strongly bulging; thorax with mesonotum with 3 or 4 pairs of strong dorsocentral setae; male fore leg with some tarsomeres usually shortened, flattened, or ornamented with processes, spines, or remarkable setulae; male hind leg with tarsomeres 2–5 regularly decreasing in length . . . . . *Telmaturgus* Mik

– Female head with clypeus more or less flat, or slightly bulging; thorax with mesonotum with at least 5 pairs of strong dorsocentral setae; fore tarsomeres usually simple, or shortened, rarely ornamented with remarkable setulae; male hind leg with tarsomeres 2–5 either regularly decreasing in length, or with at least one tarsomere shortened 64

64. Wing veins *R4+5* and *M1+2* slightly diverging rather than parallel; crossvein *dm–m* perpendicular to long axis of wing, forming an acute angle with vein *M4*; male with costal vein (*C*) thickened to vein *R1*; head with 2 postvertical setae; male mid femur with ventral setae in basal part; male mid and hind tibiae usually ornamented with remarkable bristles or processes; hind tarsomeres 2–5 regularly decreasing in length; male terminalia with epandrial

 https://www.doi.org/10.33910/2686-9519-2026-18-2-494-506

foramen mostly mid dorsal . . . . . *Teuchophorus* Loew

– Wing veins *R4+5* and *M1+2* parallel; costal vein (*C*) of male not thickened; head with 1 postvertical seta; male terminalia with epandrial foramen mostly left basolateral; other characters various 65

65. Thorax with 5 pairs of strong dorsocentral setae; male hind leg with tarsomeres 1 and 2 shortened, tarsomere 2 often with elongate process (clidium), tarsomere 3 longer than 2, tarsomere 4 shorter than 3 . . . . . *Chaetogonopteron* De Meijere

– Thorax usually with 6, rarely 5 pairs of strong dorsocentral setae; male hind leg with tarsomeres 1 and 2 not shortened, male hind leg with tarsomere 2 without elongate process, tarsomere 3 shorter than 2, often bearing 1 or more modified setae, tarsomere 4 usually longer and thinner than 3, often polished . . . *Sympycnus* Loew

66. Body size < 2 mm; head with female clypeus with 4 projecting setae; thorax with acrostichal setae absent; lateral seta of hind coxa near middle; hind tarsomere 1 markedly shorter than hind tarsomere 2; vein *M1+2* more or less straight; male terminalia pedunculate, with cercus ivory-white and subtriangular; postgonite prominent, often with several pedunculate setae (*incertae sedis*) . . . . . *Acropsilus* Mik

– Body size variable, usually > 2 mm; head with female clypeus without projecting setae; thorax with acrostichal setae present, or absent; lateral seta of hind coxa usually in basal 1⁄4; hind tarsomere 1 not markedly shorter than hind tarsomere 2; vein *M1+2* more or less straight, or with distinct sinuation; male terminalia usually encapsulated (Diaphorinae [in part]) 67

67. Head with occiput concave; antennal postpedicel compressed laterally, blade-like to subtriangular (*Argyra*), or rounded (*Falbouria*); arista-like stylus dorsal to dorsoapical 68

– Head with occiput convex, or flat; antennal postpedicel globular, reniform, conoid, or bud-like with indistinct apex, or postpedicel with apex abruptly drawn-out or elongate and slender; arista-like stylus subapical or apical, rarely dorsal, sometimes inserted in apical incision 69

68. Hind coxa with external vertical row of 3-4 setae decreasing in length ventrally; body often with argyraceous tomentosity; scape often with dorsal setae; antennae positioned at upper quarter of head . . . . . *Argyra* Macquart

– Hind coxa with one external seta at basal quarter; body without argyraceous tomentosity; scape bare; antennae positioned at middle or slightly above middle of head . . . . . *Falbouria* Dyte

69. Antennal pedicel forming a thumb-like inner condyle or conus, projecting into base of postpedicel (condyle smaller in female); male postpedicel large at base, with abruptly drawn-out apex; female postpedicel smaller, with distinct pointed apex; thorax with 4th pair of dorsocentral setae shifted medially, 5th pair shifted laterally . . . . . *Trigonocera* Becker

– Antennal pedicel not forming a thumb-like condyle or conus projecting into base of postpedicel; other features variable 70

70. Antennae located at middle of head; male head with face wider than frons; upper part of proepisternum with 2–4 fine setae; wing usually broadest at basal quarter, with nearly straight *R4+5* and *M1+2* veins . . . . . *Diaphorus* Meigen

– Antennae located at upper quarter to third of head (at middle of head in *Melanostolus*); male head with broad frons; upper part of proepisternum usually bare; wing usually broadest at middle, with convex anteriorly *R4+5* and *M1+2* veins 71

71. Relatively long, slender species; upper part of proepisternum with 2–4 fine setae; hypopygium with cercus usually free and elongate . . . . . *Nematoproctus* Loew

– Short, rather stocky species; upper part of proepisternum usually bare; hypopygium with cercus usually short 72

72. Male terminalia with epandrial lobe long and thin, sternite 8 with strong setae . . . . . *Melanostolus* Kowarz

– Male terminalia with epandrial lobe reduced, weakly projected, sternite 8 usually without strong setae . . . *Chrysotus* Meigen

Checklist of the Mediterranean genera included in the key

1. *Achalcus* Loew, 1857
2. *Acropsilus* Mik, 1878
3. *Amblypsilopus* Bigot, 1888
4. *Anahydrophorus* Becker, 1917
5. *Anepsiomyia* Bezzi, 1902
6. *Aphrosylus* Haliday, 1851
7. *Argyra* Macquart, 1834
8. *Argyrochlamys* Lamb, 1922
9. *Asyndetus* Loew, 1869
10. *Australachalcus* Pollet, 2005
11. *Campsicnemus* Haliday, 1851
12. *Chaetogonopteron* De Meijere, 1914
13. *Chrysotimus* Loew, 1857
14. *Chrysotus* Meigen, 1824
15. *Coracocephalus* Mik, 1892
16. *Corindia* Bickel, 1986
17. *Cryptophleps* Lichtwardt, 1898
18. *Cyrturella* Collin, 1952
19. *Diaphorus* Meigen, 1824
20. *Diostracus* Loew, 1861
21. *Dolichophorus* Lichtwardt, 1902
22. *Dolichopus* Latreille, 1796
23. *Eothalassius* Shamshev et Grootaert, 2005
24. *Epithalassius* Mik, 1891
25. *Ethiromyia* Brooks et Wheeler, 2005
26. *Eucoryphus* Mik, 1869
27. *Falbouria* Dyte, 1980
28. *Guzeriplia* Negrobov, 1968
29. *Gymnopternus* Loew, 1857
30. *Hercostomus* Loew, 1857
31. *Hydrophorus* Fallén, 1823
32. *Lamprochromus* Mik, 1878
33. *Liancalus* Loew, 1857
34. *Machaerium* Haliday, 1832
35. *Medetera* Fischer von Waldheim, 1819
36. *Melanostolus* Kowarz, 1884
37. *Micromorphus* Mik, 1878
38. *Microphor* Macquart, 1827
39. *Microphorella* Becker, 1909
40. *Muscidideicus* Becker, 1916
41. *Nematoproctus* Loew, 1857
42. *Nepalomyia* Hollis, 1964
43. *Neurigona* Rondani, 1856
44. *Oncopygius* Mik, 1866
45. *Orthoceratium* Schrank, 1803
46. *Ortochile* Latreille, 1809
47. *Parathalassius* Mik, 1891
48. *Peloropeodes* Wheeler, 1890
49. *Peodes* Loew, 1857
50. *Platyopsis* Parent, 1929
51. *Poecilobothrus* Mik, 1878
52. *Rhaphium* Meigen, 1803
53. *Rhynchoschizus* Dyte, 1980
54. *Scellus* Loew, 1857
55. *Schistostoma* Becker, 1902
56. *Sciapus* Zeller, 1842
57. *Shamshevia* Grichanov, 2012
58. *Sybistroma* Meigen, 1824
59. *Sympycnus* Loew, 1857
60. *Syntormon* Loew, 1857
61. *Systenus* Loew, 1857
62. *Tachytrechus* Haliday, 1851
63. *Telmaturgus* Mik, 1874
64. *Teneriffa* Becker, 1908
65. *Teuchophorus* Loew, 1857
66. *Thinophilus* Wahlberg, 1844
67. *Thrypticus* Gerstaecker, 1864
68. *Trigonocera* Becker, 1902
69. *Vetimicrotes* Dyte, 1980
70. *Xanthochlorus* Loew, 1857

Conclusion

The most recent key to dolichopodid genera from the Mediterranean region of Palaearctic is 'A checklist and Keys to Dolichopodidae (Diptera) of the Caucasus and East Mediterranean' (Grichanov 2007), which includes 52 generic names. It does not comprise five genera of the former family Microphoridae known from the region. Following the publication, three genera from that book, *Lagodechia* Negrobov et Tsurikov, *Paralleloneurum* Becker, and *Sphyrotarsus* Mik were united with the other genera (Grichanov 2013; 2023). West Mediterranean *Ceratopos* Vaillant was synonymized with *Syntormon* Loew (Evenhuis, Bickel 2021). Five mainly tropical genera were discovered in the Mediterranean region and included in the new key: *Amblypsilopus* Bigot, *Chaetogonopteron* De Meijere, *Corindia* Bickel, *Nepalomyia* Hollis, and *Shamshevia* Grichanov (Grichanov 2006; 2016; Tonguç, Grootaert 2013; Negrobov et al. 2018; Drake et al. 2023). Nine genera are conditional endemics (or nearly so) of the Mediterranean region: *Anahydrophorus*

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Becker, *Cyrturella* Collin, *Epithalassius* Mik, *Eucoryphus* Mik, *Guzeriplia* Negrobov, *Machaerium* Haliday, *Ortochile* Latreille, *Platyopsis* Parent, and *Rhynchoschizus* Dyte. The monotypic *Falbouria* Dyte is known only from the Azores archipelago. The monotypic *Teneriffa* Becker is reported from the Canary Islands and the Madeira archipelago. Most of the other Mediterranean genera are cosmopolitans or nearly so, Holarctic or Trans-Palaearctic in their distribution. A few genera are confined to West Palaearctic, sometimes reaching sub-Saharan Africa. Nevertheless, the Mediterranean basin has many endemic species of long-legged flies, especially in mountain and coastal zones (Grichanov 2026). No doubt that there are many more undescribed species from this family.

Acknowledgements

Drs. Nikita Vikhrev (Moscow) and Igor Shamshev (Saint Petersburg) kindly commented on the earlier draft of the manuscript.

Funding

This work was supported by the All-Russian Institute of Plant Protection, research project No. FGEU-2025-0001.

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For citation: Grichanov, I. Ya. (2026) A key to the Mediterranean genera of predatory flies of the family Dolichopodidae (Diptera). *Amurian Zoological Journal*, vol. XVIII, no. 2, pp. 494–506. https://www.doi.org/10.33910/2686-9519-2026-18-2-494-506

Received 12 February 2026; reviewed 1 April 2026; accepted 2 April 2026.

Для цитирования: Гричанов, И. Я. (2026) Определитель родов хищных мух-зеленушек Средиземноморской области (Diptera: Dolichopodidae). *Амурский зоологический журнал*, т. XVIII, № 2, с. 494–506. https://www.doi.org/10.33910/2686-9519-2026-18-2-494-506

Получена 12 февраля 2026; прошла рецензирование 1 апреля 2026; принята 2 апреля 2026.