

Supplementary Materials**Table S1.** Wing morphometric distances (μm) analysis between family

Distances	Fam.1-Fam.2	Calliphoridae-Muscidae	Calliphoridae-Sarcophagidae	Muscidae-Sarcophagidae
a		1515.42-1491.24*	1515.42-1514.94	1491.24-1514.94*
b		1083.28-614.12*	1083.28-922.92*	614.12-922.92*
c		1697.68-2151.72*	1697.68-1863.14*	2151.72-1863.14*
d		703.6-742.9*	703.6-698.98	742.9-698.98*
e		1341.44-1049.7*	1341.44-1535.44*	1049.7-1535.44*
f		1444.7-1550.72*	1444.7-1089.36*	1550.72-1089.36*
g		483.2-530.44*	483.2-673.56*	530.44-673.56*
h		1885.7-2228.54*	1885.7-2123.36*	2228.54-2123.36*
i		594.36-251.14*	594.36-311.2*	251.14-311.2*
j		473.64-212.02*	473.64-210.18*	212.02-210.18
k		315.56-310.68*	315.56-294.22*	310.68-294.22*
l		653.56-534.04*	653.56-669.14*	534.04-669.14*
m		256.82-239.2*	256.82-264.3*	239.2-264.3*
n		165.5-199.5*	165.5-186.2*	199.5-186.2*
o		825.92-943.64*	825.92-828.74	943.64-828.74*
p		952.56-716.92*	952.56-788.9*	716.92-788.9*
q		1054.24-1087.78*	1054.24-1086.88*	1087.78-1086.88
r		3029.4-3124.62*	3029.4-3037.06	3124.62-3037.06*
s		1397.74-1337.78*	1397.74-1364.7*	1337.78-1364.7*
t		1433.58-1355.34*	1433.58-1351.54*	1355.34-1351.54
u		605.64-1013.16*	605.64-475.62*	1013.16-475.62*
v		1098.92-850.6*	1098.92-852.88*	850.6-852.88
w		242.64-164.4*	242.64-241.88	164.4-241.88*

*significant distance (independent *t*-test; $p < 0.05$).

Table S2. Wing morphometric distances (μm) analysis between species

Distances	Sp.1-Sp.2	CN-CR	CN-HL	CN-LC	CN-CM	CN-MD	CN-PD	CR-HL
a	1448.72-1569.48*	1448.72-1430.54*	1448.72-1492.82*	1448.72-1569.76*	1448.72-1491.24*	1448.72-1514.94*	1569.48-1430.54*	
b	1138.12-1167.26*	1138.12-934.08*	1138.12-910.32*	1138.12-1204.96*	1138.12-614.12*	1138.12-922.92*	1167.26-934.08*	
c	1722.18-1627.6*	1722.18-1808.16*	1722.18-1844.38*	1722.18-1563.52*	1722.18-2151.72*	1722.18-1863.14*	1627.6-1808.16*	
d	690.96-635.64*	690.96-827.2*	690.96-752.48*	690.96-661.76*	690.96-742.9*	690.96-698.98*	635.64-827.22*	
e	1286.38-1474.84*	1286.38-1286.1	1286.38-1286.36	1286.38-1333.24*	1286.38-1049.7*	1286.38-1535.44*	1474.84-1286.1*	
f	1527.9-1537.88*	1527.9-1367.86*	1527.9-1275.62*	1527.9-1501.36*	1527.9-1550.72*	1527.9-1089.36*	1537.88-1367.86*	
g	373.88-453.36*	373.88-556.48*	373.88-551.3*	373.88-472.52*	373.88-530.44*	373.88-673.56*	453.36-556.48*	
h	2156.52-1698.98*	2156.52-2120.22*	2156.52-1901.48*	2156.52-1758.86*	2156.52-2228.54*	2156.52-2123.36*	1698.98-2120.22*	
i	301.96-754.78*	301.96-313.42*	301.96-662.52*	301.96-710.7*	301.96-251.14*	301.96-311.2*	754.78-313.42*	
j	210.36-636.06*	210.36-227.24*	210.36-520.98*	210.36-571.2*	210.36-212.02	210.36-210.18	636.06-227.24*	
k	327.16-346.8*	327.16-301.16*	327.16-271.4*	327.16-327.0	327.16-310.68*	327.16-294.22*	346.8-301.16*	
l	611.36-660.0*	611.36-682.72*	611.36-659.02*	611.36-650.96*	611.36-534.04*	611.36-669.16*	660.0-682.72*	
m	226.2-279.78*	226.2-248.06*	226.2-247.86*	226.2-266.12*	226.2-239.2*	226.2-264.3*	279.78-248.06*	
n	162.26-159.36*	162.26-191.04*	162.26-180.22*	162.26-146.68*	162.26-199.5*	162.26-186.2*	159.36-191.04*	
o	825.18-845.02*	825.18-779.98*	825.18-804.04*	825.18-852.74*	825.18-943.64*	825.18-828.74	845.02-779.98*	
p	917.92-1064.32*	917.92-831.92*	917.92-810.84*	917.92-1058.18*	917.92-716.92*	917.92-788.9*	1064.32-831.92*	
q	1128.76-998.58*	1128.76-1110.04*	1128.76-1042.54*	1128.76-1040.88*	1128.76-1087.78*	1128.76-1086.88*	998.58-1110.04*	
r	3029.44-3075.24*	3029.44-2950.22*	3029.44-3041.02*	3029.44-3023.1	3029.44-3124.62*	3029.44-3037.06	3075.24-2950.22*	
s	1521.38-1414.1*	1521.38-1398.42*	1521.38-1268.38*	1521.38-1423.34*	1521.38-1337.78*	1521.38-1364.7*	1414.1-1398.42*	
t	1323.26-1449.5*	1323.26-1413.32*	1323.26-1487.52*	1323.26-1446.26*	1323.26-1355.34*	1323.26-1351.54*	1449.5-1413.32*	
u	703.42-510.04*	703.42-676.9*	703.42-619.7*	703.42-584.04*	703.42-1013.16*	703.42-475.62*	510.04-676.92*	
v	1053.96-1211.34*	1053.96-1020.22*	1053.96-974.84*	1053.96-1172.56*	1053.96-850.6*	1053.96-852.88*	1211.34-1020.22*	
w	250.82-275.4*	250.82-210.7*	250.82-195.12*	250.82-266.72*	250.82-164.4*	250.82-241.88*	275.4-210.7*	

*significant distance (independent *t*-test; $p < 0.05$).Abbreviation: CN, *C. nigripes*; CR, *C. ruffifacies*; HL, *H. ligurriens*; LC, *L. cuprina*; CM, *C. megacephala*; MD, *M. domestica*; PD, *P. dtux*.

Table S2. Wing morphometric distances (μm) analysis between species (continued)

Distances	Sp.1-Sp.2	CR-LC	CR-CM	CR-MD	CR-PD	HL-LC	HL-CM	HL-MD
a	1569.48-1492.82*	1569.48-1569.76	1569.48-1491.24*	1569.48-1514.94*	1569.48-1514.94*	1430.54-1492.82*	1430.54-1569.76*	1430.54-1491.24*
b	1167.26-910.32*	1167.26-1204.96*	1167.26-614.12*	1167.26-922.92*	1167.26-922.92*	934.08-910.32*	934.08-1204.96*	934.08-614.12*
c	1627.6-1844.38*	1627.6-1563.52*	1627.6-2151.72*	1627.6-1863.14*	1627.6-1863.14*	1808.16-1844.38*	1808.16-1563.52*	1808.16-2151.72*
d	635.64-752.48*	635.64-661.76*	635.64-742.9*	635.64-698.98*	635.64-698.98*	827.2-752.48*	827.2-661.76*	827.2-742.9*
e	1474.84-1286.36*	1474.84-1333.24*	1474.84-1049.7*	1474.84-1535.44*	1474.84-1535.44*	1286.1-1286.36	1286.1-1333.24*	1286.1-1049.7*
f	1537.88-1275.62*	1537.88-1501.36*	1537.88-1550.72*	1537.88-1089.36*	1537.88-1089.36*	1367.86-1275.62*	1367.86-1501.36*	1367.86-1550.72*
g	453.36-551.3*	453.36-472.52*	453.36-530.44*	453.36-673.56*	453.36-673.56*	556.48-551.3	556.48-472.52*	556.48-530.44*
h	1698.98-1901.48*	1698.98-1758.86	1698.98-2228.54*	1698.98-2123.36*	1698.98-2123.36*	2120.22-1901.48*	2120.22-1758.86*	2120.22-2228.54*
i	754.78-662.52	754.78-710.7	754.78-251.14*	754.78-311.2*	754.78-311.2*	313.42-662.52*	313.42-710.7*	313.42-251.14*
j	636.06-520.98*	636.06-571.2	636.06-212.02*	636.06-210.18*	636.06-210.18*	227.24-520.98*	227.24-571.2*	227.24-212.02*
k	346.8-271.4*	346.8-327.0*	346.8-310.68*	346.8-294.22*	346.8-294.22*	301.16-271.4*	301.16-327.0*	301.16-310.68*
l	660.0-659.02	660.0-650.96*	660.0-534.04*	660.0-669.16*	660.0-669.16*	682.72-659.02*	682.72-650.96*	682.72-534.04*
m	279.78-247.86*	279.78-266.12*	279.78-239.2*	279.78-264.3*	279.78-264.3*	248.06-247.86	248.06-266.12*	248.06-239.2*
n	159.36-180.22*	159.36-146.68*	159.36-199.5*	159.36-186.2*	159.36-186.2*	191.04-180.22*	191.04-146.68*	191.04-199.5*
o	845.02-804.04*	845.02-852.74*	845.02-943.64*	845.02-828.74*	845.02-828.74*	779.98-804.04*	779.98-852.74*	779.98-943.64*
p	1064.32-810.84*	1064.32-1058.18	1064.32-716.92*	1064.32-788.9*	1064.32-788.9*	831.92-810.84*	831.92-1058.18*	831.92-716.92*
q	998.58-1042.54*	998.58-1040.88*	998.58-1087.78*	998.58-1086.88*	998.58-1086.88*	1110.04-1042.54*	1110.04-1040.88*	1110.04-1087.78*
r	3075.24-3041.02*	3075.24-3023.1*	3075.24-3124.62*	3075.24-3037.06*	3075.24-3037.06*	2950.22-3041.02*	2950.22-3023.1*	2950.22-3124.62*
s	1414.1-1268.38*	1414.1-1423.34*	1414.1-1337.78*	1414.1-1364.7*	1414.1-1364.7*	1398.42-1268.38*	1398.42-1423.34*	1398.42-1337.78*
t	1449.5-1487.52*	1449.5-1446.26	1449.5-1355.34*	1449.5-1351.54*	1449.5-1351.54*	1413.32-1487.52*	1413.32-1446.26*	1413.32-1355.34*
u	510.04-619.7*	510.04-584.04*	510.04-1013.16*	510.04-475.62*	510.04-475.62*	676.92-619.7*	676.92-584.04*	676.92-1013.16*
v	1211.34-974.84*	1211.34-1172.56*	1211.34-850.6*	1211.34-852.88*	1211.34-852.88*	1020.22-974.84*	1020.22-1172.56*	1020.22-850.6*
w	275.4-195.12*	275.4-266.72*	275.4-164.4*	275.4-241.88*	275.4-241.88*	210.7-195.12*	210.7-266.72*	210.7-164.4*

*significant distance (independent *t*-test; $p < 0.05$).Abbreviation: CN, *C. nigripes*; CR, *C. ruffifacies*; HL, *H. ligurriens*; LC, *L. cuprina*; CM, *C. megacephala*; MD, *M. domestica*; PD, *P. dux*.

Table S2. Wing morphometric distances (μm) analysis between species (continued)

Distances	Sp.1-Sp.2	HL-PD	LC-CM	LC-MD	LC-PD	CM-MD	CM-PD	MD-PD
a	1430.54-1514.94*	1492.82-1569.76*	1492.82-1491.24	1492.82-1514.94*	1569.76-1491.24*	1569.76-1514.94*	1491.24-1514.94*	
b	934.08-922.92*	910.32-1204.96*	910.32-614.12*	910.32-922.92*	1204.96-614.12*	1204.96-922.92*	614.12-922.92*	
c	1808.16-1863.14*	1844.38-1563.52*	1844.38-2151.72*	1844.38-1863.14*	1563.52-2151.72*	1563.52-1863.14*	2151.72-1863.14*	
d	827.2-698.98*	752.48-661.76*	752.48-742.9*	752.48-698.98*	661.76-742.9*	661.76-698.98*	742.9-698.98*	
e	1286.1-1535.44*	1286.36-1333.24*	1286.36-1049.7*	1286.36-1535.44*	1333.24-1049.7*	1333.24-1535.44*	1049.7-1535.44*	
f	1367.86-1089.36*	1275.62-1501.36*	1275.62-1550.72*	1275.62-1089.36*	1501.36-1550.72*	1501.36-1089.36*	1550.72-1089.36*	
g	556.48-673.56*	551.3-472.52*	551.3-530.44*	551.3-673.56*	472.52-530.44*	472.52-673.56*	530.44-673.56*	
h	2120.22-2123.36	1901.48-1758.86*	1901.48-2228.54*	1901.48-2123.36*	1758.86-2228.54*	1758.86-2123.36*	2228.54-2123.36*	
i	313.42-311.2	662.52-710.7	662.52-251.14*	662.52-311.2*	710.7-251.14*	710.7-311.2*	251.14-311.2*	
j	227.24-210.18*	520.98-571.2	520.98-212.02*	520.98-210.18*	571.2-212.02*	571.2-210.18*	212.02-210.18	
k	301.16-294.22*	271.4-327.0*	271.4-310.68*	271.4-294.22*	327.0-310.68*	327.0-294.22*	310.68-294.22*	
l	682.72-669.16*	659.02-650.96*	659.02-534.04*	659.02-669.16*	534.04-659.02*	659.02-534.04*	534.04-669.16*	
m	248.06-264.3*	247.86-266.12*	247.86-239.2*	247.86-264.3*	266.12-239.2*	266.12-264.3*	239.2-264.3*	
n	191.04-186.2*	180.22-146.68*	180.22-199.5*	180.22-186.2*	146.68-199.5*	146.68-186.2*	199.5-186.2*	
o	779.98-828.74*	804.04-852.74*	804.04-943.64*	804.04-828.74*	852.74-943.64*	852.74-828.74*	943.64-828.74*	
p	831.92-788.9*	810.84-1058.18*	810.84-716.92*	810.84-788.9*	1058.18-716.92*	1058.18-788.9*	716.92-788.9*	
q	1110.04-1086.88*	1042.54-1040.88	1042.54-1087.78*	1042.54-1086.88*	1087.78-1040.88*	1040.88-1086.88*	1087.78-1086.88	
r	2950.22-3037.06*	3041.02-3023.1*	3041.02-3124.62*	3041.02-3037.06	3124.62-3041.02*	3023.1-3037.06*	3124.62-3037.06*	
s	1398.42-1364.7*	1268.38-1423.34*	1268.38-1337.78*	1268.38-1364.7*	1423.34-1337.78*	1423.34-1364.7*	1337.78-1364.7*	
t	1413.32-1351.54*	1487.52-1446.26*	1487.52-1355.34*	1487.52-1351.54*	1355.34-1487.52*	1446.26-1351.54*	1355.34-1351.54	
u	676.92-475.62*	619.7-584.04*	619.7-1013.16*	619.7-475.62*	1013.16-619.7*	584.04-475.62*	1013.16-475.62*	
v	1020.22-852.88*	974.84-1172.56*	974.84-850.6*	974.84-852.88*	850.6-974.84*	1172.56-852.88*	850.6-852.88	
w	210.7-241.88*	195.12-266.72*	195.12-164.4*	195.12-241.88*	266.72-164.4*	266.72-241.88*	164.4-241.88*	

*significant distance (independent t-test; $p < 0.05$).Abbreviation: CN, *C. nigripes*; CR, *C. ruffifacies*; HL, *H. ligurriensis*; LC, *L. cuprina*; CM, *C. megacephala*; MD, *M. domestica*; PD, *P. dux*.