Table 1. Structure sizes and among different larval instars of the trap-jaw ant *Odontomachus bauri* workers

|  |  |  |  |
| --- | --- | --- | --- |
| Measured part | Larval instar | | |
| 1st | 2nd | 3rd |
| BL | 2.00 (1.70—2.70; N = 4) | 4.01±0.97 (3.10—5.68; N = 13) | 6.83±1.22 (3.96—5.98; N = 62) |
| BLS | 2.70 (N = 1) | 3.35 (3.30—3.90; N = 4) | 5.52±0.63 (4.6—63; N = 10) |
| BW | 0.70 (0.50—1.00; N = 4) | 1.37±0.35 (0.98—1.88; N = 13) | 1.97±0.27 (1.25—2.55; N = 62) |
| LBH | 12.25±6.97 (6.00—27.50; N = 20) | 40.59±18.12 (15.20—81.50; N =30) | 67.30±21.40 (12.20—109.80; N = 30) |
| LPH | 55.74±20.94 (16.60—113.60; N = 30) | 111.90±59.79 (42.40—157.60; N = 30) | 173.40±22.96 (133.30—207.40; N = 30) |
| HCP | 127.70.18.91 (90.90—151.50; N = 20) | 187.90±20.87 (139.40—236.30; N = 30) | 219.60±26.79 (183.00—268.40; N = 30) |
| WCP | 63.78±6.71 (51.50—72.70; N = 20) | 95.74±10.48 (72.70—121.20; N = 30) | 155.75±13.38 (134.20—183.00; N = 30) |
| HDP | 80.00; 75.00 (N = 2) | 50.00 (N = 1) | Slight elevation |
| WDP | 60.00; 65.00; 70.00 (N = 3) | 50.00 (N = 1) | — |
| DS | 11.55±0.72 (10.50—12.00; N = 10) | 18.88±1.27 (18.20—21.20; N = 40) | 27.41±2.45 (23.10—30.80; N = 100) |
| HW | 0.33 (0.30—0.43; N = 4) | 0.54±0.01 (0.53—0.65; N = 13) | 0.71±0.03 (0.63—0.78; N = 62) |
| LHH | 29.70±14.13 (10.00—65.00; N = 30) | 51.52±13.00 (30.30—34.80; N = 30) | 66.86—±14.01 (48.50—109.10; N = 30) |
| AD | 35.50 (N = 1) | 48.48; 48.48 (N = 2) | 57.78±2.69 (54.50—60.60; N = 10) |
| LL | 204.90; 167.56 (N = 2) | nm | 310.00 (300.00—318.15; N = 4) |
| LHL | 4.00; 3.00 (N = 2) | 3.00; 3.00 (N = 2) | 13.00; 6.00; 8.00 (N = 3) |
| ML | 145 (121.00—166.70; N = 5) | 212.10 (206.00—224.22; N = 5) | 275.74±13.47 (248.50—296.90; N = 5) |
| MW | 85.00 (69.70—93.90; N = 5) | 115.14 (109.10—127.30; N = 4) | 144.35±11.53 (121.20—163.60; N = 27) |
| LM | 165.13 (N = 1) | 206.04; 206.04; 199.98 (N = 3) | 227.26±11.60 (212.10—248.5 ; N = 13) |
| HMP | 32.50 (27.00—36.36; N = 5) | 45.45 (42.42—45.45; N = 4) | 59.91±4.44 (48.50—66.70; N = 27) |
| LHM | 10.16±6.71 (3.00—21.20; N = 11) | 19.70 (18.20—42.40; N = 8) | 41.82±10.83 (27.30—60.60; N = 30) |
| LLA | 135.00; 113.28 (N = 2) | nm | 206.04 (199.98—221.19; N = 6) |
| LHLA | 1.00; 1.00 (N = 2) | 1.00; 2.00; 2.00 (N = 3) | 15.00 (6.00—16.00; N = 7) |
| HG | 47.67 (42.00—54.54; N = 5) | 72.72 (66.66—72.72; N = 4) | 85.17±6.45 (63.60—90.9; N = 27) |
| HLP | 9.09; 10.00; 8.75 (N = 3) | 18.18 (12.12—18.18; N = 4) | 34.15±3.42 (30.30—41.20; N = 19) |
| HPP | — | — | 35.00; 35.00 (N = 2) |
|  |  |  |  |

Tables legends: wherever N>10, all measurements are given as means ± SD; values in parentheses are minimum—maximum interval and Number of repetions; ‘nm’ stands for ‘not measured’, where missing values ‘– ‘ resulted from impossibility to measured that sample. .Meaning of abbreviatures given in methods narrative.

Table 2. Structure sizes and among different larval instars of the trap-jaw ant *Odontomachus bauri* males

|  |  |  |  |
| --- | --- | --- | --- |
| Measured part | Larval instar | | |
| 1st | 2nd | 3rd |
| BL | 1.35±0.29 (1.10—2.00; N = 10) | 2.85±0.55 (2.10—3.60; N = 7) | 5.13±0.79 (4.00—6.90; N = 15) |
| BLS | 1.90; 2.00 (N = 2) | 2.90 (2.00—3.70; N = 6) | 6 (4.10—7.30; N = 7) |
| BW | 0.66±0.07 (0.60—0.80; N = 10) | 1.07±0.19 (0.80—.140; N = 8) | 1.82±0.22 (1.40—2.10; N = 15) |
| LBH |  | 30.33±12.25 (16.00—50.00; N = 25) | 45.25±13.94 (24.40—73.20; N = 15) |
| LPH | 31.61±13.55 (9.10—54.50; N = 30) | 93.93±25.80 (54.50—151.50; N = 30) | 164.70±28.63 (97.60—207.40; N = 30) |
| HCP | 127.90—23.32 (78.80—154.50; N = 30) | 150.80—29.76 (90.90—218.20; N = 30) | 203.10±29.26 (164.70—280.60; N = 30) |
| WCP | 51.25±6.40 (36.40—60.60; N = 20) | 71.3 0±13.38 (54.50—103.00; N = 30) | 141.88±21.23 (115.90—195.20; N = 30) |
| HDP | nm | nm | — |
| WDP | nm | nm | — |
| DS | 10.63±0.90 (9.10—12.10; N = 10) | 14.97±1.64 (12.00—19.80; N = 50) | 24.30±3.75 (18.20—27.30; N = 60) |
| HW | 0.40±0.02 (0.37—0.43; N = 10) | 0.53 (0.46—0.54; N = 7) | 0.65±0.03 (0.59—0.71; N = 16) |
| LHH | 10.16±3.19 (4.50—17.60; N = 30) | 34.85±9.44 (15.20—48.50; N = 30) | 75.55±15.56 (36.40—97.00; N = 30) |
| AD | 21.6; 25.75; 23.2 (N = 3) | 30.30; 36.36 (N = 2) | 42.42 (41.20—48.48; N = 5) |
| LL | 202.86; 212.16 (N = 2) | 230.28; 257.04 (N = 2) | 260.58; 324.60; 299.82 (N = 3) |
| LHL | nm | nm | nm |
| ML | 154.53; 147.00; 131.04 (N = 3) | 216.16 (190.90—233.30; N = 6) | 284.82 (251.50—296.90; N = 8) |
| MW | 78.78 (N = 1) | 100.00 (93.90—115.10; N = 5) | 145.44 (133.30—157.60; N =6) |
| LM | 124.23 (N = 1) | 206.04; 206.04; 199.98 (N = 3) | 227.26±11.60 (212.10—248.5; N = 13) |
| HMP | 24.24 (N = 1) | 42.42 (36.36—51.50; N = 5) | 54.54 (51.51—69.69; N = 6) |
| LHM | 6.06 (3.00—9.06; N = 7) | 14.06±5.53 (6.10—24.00; N=16) | 25.66±6.54 (18.20—42.40; N = 17) |
| LLA | 141.44 (N = 1) | 178.77; 187.68 (N = 2) | 227.22; 202.51 (N = 2) |
| LHLA | nm | nm | nm |
| HG | 45.45 (N = 1) | 60.60 (56.05—78.80; N = 5) | 81.81 (71.20—87.87; N = 6) |
| HLP | 10.60 (N = 1) | 15.15 (12.12—15.15; N = 4) | 39.39 (21.21—42.42; N = 23) |
| HPP | — | — | nm |

Tables legends: wherever N>10, all measurements are given as means ± SD; values in parentheses are minimum—maximum interval and Number of repetions; ‘nm’ stands for ‘not measured’, where missing values ‘– ‘ resulted from impossibility to measured that sample. .Meaning of abbreviatures given in methods narrative.

Table 3. Structure sizes and among different larval instars of the trap-jaw ant *Odontomachus meinerti* males

|  |  |  |  |
| --- | --- | --- | --- |
| Measured part | Larval instar | | |
| 1st | 2nd | 3rd |
| BL | 1.31±0.39 (0.90—3.00; N = 29) | 2.64±0.34 (1.80—3.60; N = 17) | 4.39±0.65 (3.40—5.90; N = 24) |
| BLS | 1.80 (1.20—2.30; N = 7) | 2.20; 2.70; 3.60 (N = 3) | 5.05 (4.20—5.40; N = 7) |
| BW | 0.64±16 (0.50—1.10; N = 29) | 1.10±0.13 (0.90—1.40; N = 17) | 1.5±0.29 (1.10—2.10; N = 24) |
| LBH | 12.22±4.04 (5.60—21.20; N = 30) | 30.75±9.40 (12.90—58.10; N = 30) | 54.27±27.53 (18.20—109.80; N = 30) |
| LPH | 52.62±21.90 (18.20—90.90; N = 30) | 125.60±24.96 (72.70—163.60; N = 30) | 191.70±36.26 (109.10—268.40; N = 30) |
| HCP | 121.30±21.12 (76.40—157.60; N = 30) | 186.40±40.09 (48.50—242.40; N = 20) | 189.10±26.48 (146.40—244.00; N = 30) |
| WCP | 51.82±11.20 (36.40—81.80; N = 30) | 94.91±13.82 (73.40—121.20; N = 20) | 145.38±23.22 (97.60—183.00; N = 23) |
| HDP | nm | nm | — |
| WDP | nm | nm | — |
| DS | 11.24±1.54 (8.20—14.30; N = 60) | 16.83±0.59 (15.50—17.20; N = 20) | 25.38±1.19 (22.40—26.90; N = 50) |
| HW | 0.35±0.03 (0.29—0.40; N = 29) | 0.48±0.02 (0.46—0.51; N = 17) | 0.56±0.02 (0.54—0.60; N = 24) |
| LHH | 19.70±9.35 (6.10—42.40; N = 30) | 50.47±14.99 (22.70—81.80; N = 30) | 79.99±15.22 (48.50—115.10; N = 30) |
| AD | 24.20 (22.70—27.30; N = 30) | 36.36; 28.78 (N =2) | 48.48; 42.42 (N = 2) |
| LL | 177.08 (172.71—215.13; N = 4) | 256.00; 259.06; 239.37 (N = 3) | 290.88; 336.33; 280.60 (N = 3) |
| LHL | nm | nm |  |
| ML | 145.44 (121.20—163.60; N = 7) | 202.00; 224.20; 212.10 (N = 3) | 260.58 (248.50—260.60; N = 6) |
| MW | 72.72 (66.70—78.80; N = 7) | 109.08; 106.05 (N = 2) | 127.26 (121.20—130.30; N = 5) |
| LM | 127.26 (121.20—136.35; N = 5) | 172.71; 178.77 (N = 2) | 224.22; 224.22; 230.28 (N = 3) |
| HMP | 33.33 (24.24—36.36; N = 6) | 45.45; 45.45 (N = 2) | 51.51 (45.45—54.54; N = 5) |
| LHM | 9.09 (6.10—19.70; N = 9) | 19.74±6.04 (9.10—27.30; N = 12) | 34.72±6.66 (21.20—48.50; N=13) |
| LLA | 153.01; 121.20; 125.82 (N = 3) | 184.00; 196.95; 206.04 (N = 3) | 224.22; 239.37; 202.40 (N = 3) |
| LHLA | 8.00 (7.57—9.09; N = 5) | 15.15; 15.15 (N = 2) | 33.33 (30.30—33.33; N = 5) |
| HG | 45.45 (33.33—45.45; N = 6) | 63.63; 60.60 (N = 2) | 72.72 (66.66—75.75; N = 5) |
| HLP | — | — | nm |
| HPP | — | — | nm |

Tables legends: wherever N>10, all measurements are given as means ± SD; values in parentheses are minimum—maximum interval and Number of repetions; ‘nm’ stands for ‘not measured’, where missing values ‘– ‘ resulted from impossibility to measured that sample. .Meaning of abbreviatures given in methods narrative.

Table 4. Structure sizes and among different larval instars of the trap-jaw ant *Odontomachus meinerti* workers

|  |  |  |  |
| --- | --- | --- | --- |
| Measured part | Larval instar | | |
| 1st | 2nd | 3rd |
| BL | 1.71±0.40 (1.19—2.71; N = 61) | 2.91±0.43 (1.01—5.02; N = 48) | 5.22±0.9 (3.63—6.86; N = 70) |
| BLS | 2.15±0.39 (1.50—2.80; N = 10) | 3.27±0.33 (2.70—3.80; N = 10) | 5.79±0.57 (5.00—6.70; N = 10) |
| BW | 0.63±0.12 (0.43—0.86; N = 61) | 1.00±1.40 (0.79—1.65; N = 48) | 1.65±0.25 (1.25—2.15; N = 70) |
| LBH |  | 22.14±10.29 (9.30—54.50; N = 30) | 66.08±16.81 (30.50—103.70; N = 30) |
| LPH | 57.98±9.93 (42.40—84.80; N = 30) | 111.80±12.42 (84.80—139.40; N = 30) | 175.10±18.17 (146.40—206.00; N = 30) |
| HCP | 129.10±16.69 (90.90—163.60; N = 30) | 165.30±13.53 (139.40—195.20; N = 30) | 185.60±26.69 (146.40—256.80; N = 23) |
| WCP | 71.62±12.45 (48.50—97.00; N = 30) | 97.78±12.74 (72.70—122.00; N = 30) | 127.64±15.36 (85.40—159.50; N = 30) |
| HDP | nm | nm | — |
| WDP | nm | nm | — |
| DS | 11.30±2.13 (5.00—16.20; N = 100) | 17.57±1.89 (13.60—22.80; N = 100) | 24.89±1.80 (18.20—18.80; N = 100) |
| HW | 0.33±0.03 (0.30—0.40; N = 57) | 0.47±0.03 (0.43—0.53; N = 48) | 0.59±0.02 (0.56—0.66; N = 70) |
| LHH | 28.89±7.99 (15.20—45.50; N = 30) | 56.05±.8.15 (42.40—72.70; N = 30) | 65.46±5.25 (54.50—78.80; N = 30) |
| AD | 26.85 (25.80—28.80; N = 6) | 34.85 (30.30—36.40; N = 6) | 47.00 (44.00—48.50; N = 6) |
| LL | 114.00; 148.00 (N = 2) | 256.30 (253.89—258.63; N = 4) | 295.10 (290.88—305.40; N = 7) |
| LHL | nm | nm |  |
| ML | 143.46±18.00 (122.00—166.70; N = 16) | 206.40±12.78 (187.90—227.30; N =13) | 257.97±11.81 (245.40—284.80; N = 16) |
| MW | 79.27±11.57 (65.30—93.90; N = 16) | 109.97±6.83 (103.00—122.00; N = 13) | 141.24±11.31 (127.30—157.60; N =16) |
| LM | 151.50; 148.47; 163.62 (N = 3) | 195.43 (184.83—212.10; N = 4) | 224.22 (216.64—254.52; N = 5) |
| HMP | 28.24 ±4.24 (21.20—33.33;N = 14) | 44.17 ±2.93 (39.40—48.50; N = 11) | 55.51±4.47 (48.50—60.60; N = 14) |
| LHM | 7.81±3.52 (3—15.2; N=30) | 18.36±6.75 (9.10—30.30; N=19) | 32.28±11.31 (15.80—66.70; N=27) |
| LLA | 94.24; 110.00 (N = 2) | 174.75 (166.65 —180.11; N = 5) | 196.98 (195.00—218.16; N =7) |
| LHLA | 7.57 (6.81—10.92; N = 7) | 16.15 (15.15 —21.21; N = 7) | 33.78±3.87 (30.30—42.40; N = 10) |
| HG | 44.57±4.41 (36.40—48.60; N = 14) | 63.57±3.52 (57.60—66.70; N = 11) | 73.91±2.83 (69.70—78.80; N = 15) |
| HLP | 9.09 (6.81—10.92; N = 7) | 18.18 (15.15—21.21; N = 7) | 33.78±3.87 (30.30—42.40; N = 13) |
| HPP | — | — | nm |

Tables legends: wherever N>10, all measurements are given as means ± SD; values in parentheses are minimum—maximum interval and Number of repetions; ‘nm’ stands for ‘not measured’, where missing values ‘– ‘ resulted from impossibility to measured that sample. .Meaning of abbreviatures given in methods narrative.

Table 5. Structure sizes and among different larval instars of the trap-jaw ant *Odontomachus brunneus* males

|  |  |  |  |
| --- | --- | --- | --- |
| Measured part | Larval instar | | |
| 1st | 2nd | 3rd |
| BL | 1.39±0.39 (0.84—2.02; N = 16) | 2.10±0.36 (1.61—3.16; N = 23) | 3.36±0.71 (1.62—4.92; N = 62) |
| BLS |  |  |  |
| BW | 0.92± 0.17 (0.62—1.16; N = 16) | 1.29±0.28 (1.01—1.83; N = 23) | 1.79± 0.23 (1.06—2.21; N = 62) |
| LBH | nm | nm | nm |
| LPH | nm | nm | nm |
| HCP | nm | nm | nm |
| WCP | nm | nm | nm |
| HDP | nm | nm | — |
| WDP | nm | nm | — |
| DS | nm | nm | nm |
| HW | 0.40±0.02 (0.36—0.44; N = 16) | 0.51±0.03 (0.47—0.56; N = 23) | 0.62±0.02 (0.58—0.72; N = 64) |
| LHH | nm | nm | nm |
| AD | nm | nm | nm |
| LL | nm | nm | nm |
| LHL | nm | nm | nm |
| ML | nm | nm | nm |
| MW | nm | nm | nm |
| LM | nm | nm | nm |
| HMP | nm | nm | nm |
| LHM | nm | nm | nm |
| LLA | nm | nm | nm |
| LHLA | nm | nm | nm |
| HG | nm | nm | nm |
| HLP | nm | nm | nm |
| HPP | — | — | nm |

Tables legends: wherever N>10, all measurements are given as means ± SD; values in parentheses are minimum—maximum interval and Number of repetions; ‘nm’ stands for ‘not measured’, where missing values ‘– ‘ resulted from impossibility to measured that sample. .Meaning of abbreviatures given in methods narrative.

Table 6. Structure sizes and among different larval instars of the trap-jaw ant *Odontomachus brunneus* workers

|  |  |  |  |
| --- | --- | --- | --- |
| Measured part | Larval instar | | |
| 1st | 2nd | 3rd |
| BL | 1.12±0.22 (0.76—1.67; N = 26) | 2.15±0.52 (1.39—3.39; N = 57) | 3.02±0.59 (2.09—4.14; N = 66) |
| BLS | 1.67 (1.49—1.79; N = 4) | 2.41 (2.33—2.64; N = 5) | 2.52 (2.26—2.63; N = 5) |
| BW | 0.71±0.11 (0.54—0.96; N = 26) | 1.25±0.20 (0.99—1.71; N = 57) | 1.64±0.24 (1.19—2.09; N = 66) |
| LBH | 9.94±3.40 (5.00—16.00; N = 17) | 29.85±9.50 (12.50—40.00; N = 14) | 12.50—45.00 (8.00—30.00; N = 19) |
| LPH | 27.50±7.25 (12.50—35.00; N = 15) | 47.50±20.00 (17.50—90.00; N = 43) | 101.00±11.25 (75.00—125.00; N = 40) |
| HCP | 180.00±22.00 (145.00—215.00; N = 17) | 116.50±37.50 (87.50—225.00; N = 31) | 150.00±18.50 (112—190; N = 36) |
| WCP | 43.82±8.50 (35.00—65.00; N = 17) | 28.90±11.34 (15.00—52.00; N = 18) | 28.00±6.00 (20.00—35.00; N = 36) |
| HDP | 100.00; 90.00 (N = 2) | 105.00 (60.00—120.00; N = 4) | Slight elevation |
| WDP | 80.00; 90.00; 95.00 (N = 3) | 90.00 (60.00—110.00; N = 6) | 220.00; 220.00; 200.00 (N = 3) |
| DS | 13.00 (N =1) | 20.00; 24.00; 25.00 (N = 3) | 30.00 (N = 1) |
| HW | 0.39±0.19 (0.35—0.44; N = 26) | 0.52±0.03 (0.45—0.56; N = 57) | 0.61±0.02 (0.57—0.67; N = 67) |
| LHH | 9.00 (7.00—10.00; N = 6) | 57.50 (52.50—87.50; N = 7) | 60.00±1.9.50 (25.00—105.00; N = 23) |
| AD | 18.00 (N = 1) | 20.00 (N = 1) | 29.00; 40.00 (N = 2) |
| LL | 110.00 (112.50—195.00; N = 4) | 195.00 (160.00—260.00; N = 5) | 270.00; 300.00 (N = 2) |
| LHL | 2.00; 3.00; 3.00 (N = 3) | 10.00 (8.00—12.00; N = 4) | 19.5±3.34 (13—25; N = 12) |
| ML | 90.00 (65.00—100.00; N = 5) | 170.00 (150.00—180.00; N = 7) | 261.30±8.34 (250.00—270.00; N = 5) |
| MW | 90.00 (65.00—100.00; N = 5) | 52.50 (47.20—60.00; N = 5) | 55.00 (50—62.70; N = 7) |
| LM | 65.00 (62.00—76.67; N = 5) | 95.20 (N = 1) | 200.00 (175.00—220.00;N = 5) |
| HMP | 20.00 (15.00—25.00; N = 5) | 35.00 (N = 1) | 25.00; 30.00; 30.00 (N = 3) |
| LHM | 6.00 (4.00—7.00; N = 5) | 12.00 (9.00—23.00; N = 8) | 29.00 (12.00—33.00; N = 6) |
| LLA | 97.00; 105.00 (N = 2) | 115.00; 150.00; 190.00 (N = 3) | 80.00; 85.00 (N = 2) |
| LHLA | 2.00 (N = 1) | 4.91±1.56 (3.00—8.00; N =12) | 22.00 (16.00—25.00; N = 6) |
| HG | 36.67 (30.00—45.00; N = 5) | 62.50; 65.00 (N = 2) | 70.00 (60.00—80.00; N = 4) |
| HLP | Slight elevation | 10.00; 16.00 (N = 2) | 30.00; 32.00; 33.00 (N = 3) |
| HPP | — | — | 33.00; 33.00; 34.00 (N = 3) |

Tables legends: wherever N>10, all measurements are given as means ± SD; values in parentheses are minimum—maximum interval and Number of repetions; ‘nm’ stands for ‘not measured’, where missing values ‘– ‘ resulted from impossibility to measured that sample. .Meaning of abbreviatures given in methods narrative.