

Table S1. Information about the experimental conditions during measurements of metabolic rate in 27 cephalopod species.

| Species | b_R | Fasting period (h) | Acclimation period (h) | Forced to swim | Metabolic rates measured | Notes | Reference |
|-----------------------------------|-------|--------------------|------------------------|----------------|--------------------------|--|-----------|
| <i>Argonauta nouryi</i> | 0.86 | 4-10 h | ND | No | Routine | None | 1 |
| <i>Dosidicus gigas</i> | 0.88 | NA | 9 | No | Routine | Activity minimised to the greatest extent possible | 2 |
| <i>Eledonella pygmaea</i> | 0.88 | Several hours | ND | No | Routine | None | 3,4 |
| <i>Enteroctopus megalocyathus</i> | 0.71 | 8 | 2 | No | Routine | None | 5 |
| <i>Galiteuthis glacialis</i> | 0.65 | ND | 1 | No | Routine | Excluded ($r = 0.67$) | 6 |
| <i>Gonatus onyx</i> | 1.01 | Several hours | ND | No | Routine | None | 3,4 |
| <i>Gonatus pyros</i> | 1.00 | Several hours | ND | No | Routine | None | 3,4 |
| <i>Helicocranchia pfefferi</i> | 0.62 | Several hours | ND | No | Routine | None | 3,4 |
| <i>Histioteuthis heteropsis</i> | 0.78 | Several hours | 4 | No | Routine | None | 3,4,8 |
| <i>Illex illecebrosus</i> | 0.725 | 24 | 1-3 h | Yes | Standard | Extrapolated to zero activity | 9 |
| <i>Illex illecebrosus</i> | 0.73 | 24 | 1-3 h | Yes | Standard | Extrapolated to zero activity | 10 |
| <i>Japetella diaphana</i> | 0.73 | Several hours | ND | No | Routine | None | 3,4 |
| <i>Japetella heathi</i> | 0.73 | Several hours | ND | No | Routine | None | 3,4 |
| <i>Liocranchia valdivia</i> | 0.84 | Several hours | ND | No | Routine | None | 3,4 |
| <i>Loligo forbesi</i> | 0.729 | 0-24 h | 2-3 h | No | Routine | None | 11 |
| <i>Loligo forbesi</i> | 0.849 | 6-24 h | 2-6 h | No | Routine | None | 12 |
| <i>Loligo pealei</i> | 0.52 | Not fasted | 30 | No | Active | Excluded (not fasted) | 13 |
| <i>Loligo pealei</i> | 1.28 | Not fasted | 30 | No | Active | Excluded (not fasted) | 13 |

| | | | | | | | |
|------------------------------|-------|------------|---------|-------|----------|--|----|
| <i>Loligo pealei</i> | 0.52 | Not fasted | 30 | No | Active | Excluded (not fasted) | 13 |
| <i>Loligo pealei</i> | 0.49 | Not fasted | 30 | No | Active | Excluded (not fasted) | 13 |
| <i>Lolliguncula brevis</i> | 0.706 | 24 h | 0.33 | Yes | Active | Excluded (animals were swimming, data based on size class average) | 14 |
| <i>Lolliguncula brevis</i> | 0.91 | 6 h | ND | Mixed | Routine | Animals were observed for activity | 12 |
| <i>Octopus cyanea</i> | 0.83 | ND | 0.25 | No | Standard | Restless animals and those that did not settle down were excluded | 15 |
| <i>Octopus maya</i> | 0.63 | 6 | 6 | No | Routine | Measurements made overnight to reduce environmental disturbance | 16 |
| <i>Octopus maya</i> | 0.69 | 8 | 12 | No | Routine | None | 5 |
| <i>Octopus maya</i> | 0.9 | 6 | NA | No | Standard | Only data from tranquil animals were included | 12 |
| <i>Octopus maya</i> | 0.84 | NA | 0.25 | No | Standard | None | 17 |
| <i>Octopus ocellatus</i> | 0.84 | 12 | 2 | No | Routine | Time of measurement was standardised to avoid variability due to circadian rhythms | 18 |
| <i>Octopus ocellatus</i> | 0.79 | 12 | 2 | No | Routine | Time of measurement was standardised to avoid variability due to circadian rhythms | 18 |
| <i>Octopus vulgaris</i> | 0.72 | 36 | 168 | No | Routine | None | 19 |
| <i>Octopus vulgaris</i> | 0.89 | 18 | 168 | No | Routine | None | 20 |
| <i>Octopus vulgaris</i> | 0.91 | 18 | 168 | No | Routine | None | 20 |
| <i>Octopus vulgaris</i> | 0.95 | 18 | 168 | No | Routine | None | 20 |
| <i>Octopus vulgaris</i> | 0.89 | 18 | 168 | No | Routine | None | 20 |
| <i>Octopus vulgaris</i> | 0.86 | 18 | 168 | No | Routine | None | 20 |
| <i>Octopus vulgaris</i> | 0.83 | 18 | 168 | No | Routine | None | 20 |
| <i>Octopus vulgaris</i> | 0.82 | ND | 2 | No | Routine | None | 21 |
| <i>Octopus vulgaris</i> | 1.04 | Not fasted | 1 month | No | Routine | Excluded (not fasted) | 22 |
| <i>Onychoteuthis banksii</i> | 0.84 | ND | ND | ND | Routine | Not specified | 23 |
| <i>Sepia officinalis</i> | 0.84 | 12 | ND | No | Routine | None | 24 |
| <i>Sepia officinalis</i> | 0.76 | 96 | 0.5 | No | Standard | None | 25 |

| | | | | | | | |
|-----------------------------------|------|------------------|--------------------|----|----------|---|-----|
| <i>Sepia officinalis</i> | 0.74 | 96 | 0.5 | No | Routine | Moving slowly or hovering | 25 |
| <i>Sepia officinalis</i> | 0.91 | ND | Till quiescence | No | Routine | Only resting or moderately active animals were used for calculations | 26 |
| <i>Sepia officinalis</i> | 0.85 | ND | 2 | No | Routine | None | 21 |
| <i>Sepia officinalis</i> | 0.79 | 24 | 24 | No | Routine | None | 27 |
| <i>Sepioteuthis lessoniana</i> | 0.7 | 12 | 1 | No | Routine | Only data from tranquil animals included | 28 |
| <i>Sepioteuthis lessoniana</i> | 0.72 | 12 | 1 | No | Routine | Only data from tranquil animals included | 28 |
| <i>Sepioteuthis lessoniana</i> | 0.81 | 12 | 1 | No | Routine | Only data from tranquil animals included | 28 |
| <i>Sepioteuthis lessoniana</i> | 0.99 | 12 | 1 | No | Routine | None | 29 |
| <i>Sepioteuthis lessoniana</i> | 1.02 | 12 | 1 | No | Routine | None | 29 |
| <i>Sepioteuthis lessoniana</i> | 0.98 | 12 | 1 | No | Routine | None | 29 |
| <i>Sepioteuthis lessoniana</i> | 0.85 | 12 | 1 | No | Routine | None | 29 |
| <i>Sepioteuthis lessoniana</i> | 1.04 | 12 | 1 | No | Routine | None | 29 |
| <i>Stauroteuthis syrtensis</i> | 0.75 | 28 | 2-6 h | No | Routine | Excluded ($r = 0.73$) | 30 |
| <i>Sthenoteuthis oualaniensis</i> | 0.78 | ND | ND | ND | Standard | None | 31 |
| <i>Sthenoteuthis pteropus</i> | 0.87 | ND | ND | ND | Standard | None | 31 |
| <i>Vampyroteuthis infernalis</i> | 0.72 | Several hours | ND | No | Routine | None | 3,4 |

Table S2. Orders and lifestyles of cephalopod species included in the metabolic scaling (b_R) and mass-length scaling (b_L) analyses with accompanying references.

| Order | Species | Lifestyle | Reference |
|-------------|--------------------------------------|---------------|-----------|
| Idiosepiida | <i>Idiosepius notoides</i> | Benthopelagic | 32 |
| Myopsida | <i>Alloteuthis media</i> | Pelagic | 33 |
| Myopsida | <i>Alloteuthis subulata</i> | Pelagic | 34 |
| Myopsida | <i>Doryteuthis pleii</i> | Pelagic | 33 |
| Myopsida | <i>Doryteuthis sanpaulensis</i> | Pelagic | 33 |
| Myopsida | <i>Loligo forbesii</i> | Pelagic | 12 |
| Myopsida | <i>Loligo vulgaris</i> | Pelagic | 33 |
| Myopsida | <i>Loliolus noctiluca</i> | Pelagic | 35 |
| Myopsida | <i>Lolliguncula brevis</i> | Pelagic | 36 |
| Myopsida | <i>Lolliguncula diomedea</i> | Pelagic | 37 |
| Myopsida | <i>Lolliguncula panamensis</i> | Pelagic | 37 |
| Myopsida | <i>Sepioteuthis lessoniana</i> | Pelagic | 28 |
| Myopsida | <i>Uroteuthis chinensis</i> | Pelagic | 38 |
| Myopsida | <i>Uroteuthis duvaucelii</i> | Pelagic | 38 |
| Myopsida | <i>Uroteuthis edulis</i> | Pelagic | 39 |
| Octopoda | <i>Argonauta nouryi</i> | Pelagic | 40 |
| Octopoda | <i>Bathypolypus sponsalis</i> | Benthic | 41 |
| Octopoda | <i>Eledone cirrhosa</i> | Benthic | 42 |
| Octopoda | <i>Eledone moschata</i> | Benthic | 42 |
| Octopoda | <i>Eledonella pygmaea</i> | Bathypelagic | 40 |
| Octopoda | <i>Enteroctopus megalocyathus</i> | Benthic | 43 |
| Octopoda | <i>Japetella diaphana</i> | Bathypelagic | 40 |
| Octopoda | <i>Japetella heathi</i> | Bathypelagic | 40 |
| Octopoda | <i>Octopus bimaculoides</i> | Benthic | 44 |
| Octopoda | <i>Octopus cyanea</i> | Benthic | 45 |
| Octopoda | <i>Octopus digueti</i> | Benthic | 46 |
| Octopoda | <i>Octopus joubini</i> | Benthic | 47 |
| Octopoda | <i>Octopus macropus</i> | Benthic | 48 |
| Octopoda | <i>Octopus maya</i> | Benthic | 17 |
| Octopoda | <i>Octopus mimus</i> | Benthic | 49 |
| Octopoda | <i>Octopus ocellatus</i> | Benthic | 18 |
| Octopoda | <i>Octopus salutii</i> | Benthic | 50 |
| Octopoda | <i>Octopus vulgaris</i> | Benthic | 51 |
| Octopoda | <i>Pteroctopus tetracirrhus</i> | Benthic | 50 |
| Octopoda | <i>Scaevurgus unircirrhus</i> | Benthic | 51 |
| Oegopsida | <i>Ancistroteuthis lichtensteini</i> | Pelagic | 41 |
| Oegopsida | <i>Dosidicus gigas</i> | Pelagic | 52 |
| Oegopsida | <i>Gonatus onyx</i> | Pelagic | 7 |
| Oegopsida | <i>Gonatus pyros</i> | Pelagic | 7 |
| Oegopsida | <i>Helicocranchia pfefferi</i> | Pelagic | 53 |
| Oegopsida | <i>Histioteuthis bonnellii</i> | Pelagic | 54 |
| Oegopsida | <i>Histioteuthis heteropsis</i> | Pelagic | 8 |
| Oegopsida | <i>Histioteuthis miranda</i> | Pelagic | 55 |
| Oegopsida | <i>Histioteuthis reversa</i> | Pelagic | 56 |
| Oegopsida | <i>Illex argentinus</i> | Pelagic | 45 |
| Oegopsida | <i>Illex coindetii</i> | Pelagic | 45 |

| | | | |
|---------------|--------------------------------------|---------------|----|
| Oegopsida | <i>Illex illecebrosus</i> | Pelagic | 57 |
| Oegopsida | <i>Liocranchia valdivia</i> | Pelagic | 3 |
| Oegopsida | <i>Ommastrephes bartramii</i> | Pelagic | 58 |
| Oegopsida | <i>Onychoteuthis banksii</i> | Pelagic | 40 |
| Oegopsida | <i>Onychoteuthis borealijaponica</i> | Pelagic | 59 |
| Oegopsida | <i>Ornithoteuthis antillarum</i> | Pelagic | 60 |
| Oegopsida | <i>Sthenoteuthis oualaniensis</i> | Pelagic | 40 |
| Oegopsida | <i>Sthenoteuthis pteropus</i> | Pelagic | 40 |
| Oegopsida | <i>Todarodes sagittatus</i> | Pelagic | 61 |
| Oegopsida | <i>Todaropsis eblanae</i> | Pelagic | 61 |
| Sepiida | <i>Heteroteuthis dispar</i> | Pelagic | 62 |
| Sepiida | <i>Neorossia caroli</i> | Benthic | 63 |
| Sepiida | <i>Rossia macrosoma</i> | Benthic | 64 |
| Sepiida | <i>Sepia aculeata</i> | Benthopelagic | 65 |
| Sepiida | <i>Sepia elegans</i> | Benthopelagic | 45 |
| Sepiida | <i>Sepia officinalis</i> | Benthopelagic | 45 |
| Sepiida | <i>Sepia pharaonis</i> | Benthopelagic | 45 |
| Sepiida | <i>Sepia prashadi</i> | Benthopelagic | 66 |
| Sepiida | <i>Sepiella inermis</i> | Benthopelagic | 67 |
| Sepiida | <i>Sepietta oweniana</i> | Benthopelagic | 68 |
| Sepiida | <i>Sepiola atlantica</i> | Benthic | 69 |
| Vampyromorpha | <i>Vampyroteuthis infernalis</i> | Bathypelagic | 70 |

Table S3. Cephalopod orders, measurement temperatures, body-mass ranges, respiration-mass (b_R) scaling exponents, mass-specific metabolic levels (L), and correlation coefficients (r) of metabolic scaling regressions of the species included in comparative analyses.

| Order | Species | Lower mass of range (g) | Upper mass of range (g) | Temperature (°C) | b_R | Correlation coefficient (r) | L ($\mu\text{l O}_2$ gWM ⁻¹ h ⁻¹) | Reference |
|----------|-----------------------------------|-------------------------|-------------------------|------------------|-------|---------------------------------|---|-----------|
| Myopsida | <i>Loligo forbesii</i> | 0.01 | 0.12 | 12.7 | 0.85 | 0.99 | 693.07 | 12 |
| Myopsida | <i>Lolliguncula brevis</i> | 2.00 | 40.00 | 24.25 | 0.91 | 0.99 | 552.15 | 12 |
| Myopsida | <i>Sepioteuthis lessoniana</i> | 0.10 | 27.27 | 25 | 0.74 | 0.98 | 612.08 | 28 |
| Myopsida | <i>Sepioteuthis lessoniana</i> | 0.43 | 69.43 | 25 | 0.78 | 0.99 | 491.80 | 28 |
| Myopsida | <i>Sepioteuthis lessoniana</i> | 0.50 | 7.16 | 25 | 0.81 | 0.97 | 716.28 | 28 |
| Myopsida | <i>Sepioteuthis lessoniana</i> | 0.03 | 0.5 | 25 | 0.94 | 0.99 | 1083.65 | 28 |
| Myopsida | <i>Sepioteuthis lessoniana</i> | 0.04 | 4.28 | 10 | 0.99 | 0.99 | 322.55 | 29 |
| Myopsida | <i>Sepioteuthis lessoniana</i> | 0.04 | 3.59 | 15 | 1.02 | 0.99 | 388.24 | 29 |
| Myopsida | <i>Sepioteuthis lessoniana</i> | 0.05 | 3.50 | 20 | 0.98 | 0.99 | 559.67 | 29 |
| Myopsida | <i>Sepioteuthis lessoniana</i> | 0.04 | 4.13 | 25 | 0.89 | 0.99 | 885.21 | 29 |
| Myopsida | <i>Sepioteuthis lessoniana</i> | 0.05 | 3.82 | 30 | 0.85 | 0.99 | 875.51 | 29 |
| Octopoda | <i>Argonauta nouryi</i> | 1.70 | 5.06 | 20 | 0.86 | 0.94 | 142.47 | 1 |
| Octopoda | <i>Eledonella pygmaea</i> | 2.03 | 60.82 | 5 | 0.88 | 0.86 | 3.34 | 4 |
| Octopoda | <i>Enteroctopus megalocyathus</i> | 10.55 | 2585.00 | 10 | 0.71 | 0.84 | 31.19 | 5 |
| Octopoda | <i>Japetella diaphana</i> | 0.02 | 242.17 | 5 | 0.73 | 0.99 | 4.39 | 4 |
| Octopoda | <i>Japetella heathi</i> | 0.84 | 162.50 | 5 | 0.73 | 0.92 | 3.85 | 4 |
| Octopoda | <i>Octopus cyanea</i> | 0.57 | 2300.00 | 26 | 0.83 | 0.99 | 153.61 | 15 |
| Octopoda | <i>Octopus maya</i> | 0.20 | 1350.00 | 27 | 0.63 | 0.96 | 334.06 | 16 |
| Octopoda | <i>Octopus maya</i> | 0.11 | 81.23 | 24.7 | 0.90 | 0.99 | 203.54 | 12 |
| Octopoda | <i>Octopus maya</i> | 0.38 | 136.80 | 15 | 0.84 | 0.99 | 98.01 | 17 |
| Octopoda | <i>Octopus ocellatus</i> | 0.29 | 30.87 | 20 | 0.84 | 0.97 | 179.38 | 18 |
| Octopoda | <i>Octopus ocellatus</i> | 0.29 | 58.21 | 25 | 0.79 | 0.98 | 189.46 | 18 |
| Octopoda | <i>Octopus vulgaris</i> | 220.00 | 3260.00 | 15 | 0.72 | 0.94 | 59.16 | 19 |
| Octopoda | <i>Octopus vulgaris</i> | 89.48 | 2114.88 | 13 | 0.89 | 0.98 | 25.56 | 20 |
| Octopoda | <i>Octopus vulgaris</i> | 139.15 | 2154.86 | 15.5 | 0.91 | 0.95 | 37.89 | 20 |
| Octopoda | <i>Octopus vulgaris</i> | 18.57 | 1857.94 | 20 | 0.95 | 0.98 | 74.08 | 20 |
| Octopoda | <i>Octopus vulgaris</i> | 19.38 | 1753.49 | 25 | 0.89 | 0.98 | 83.63 | 20 |

| | | | | | | | | |
|---------------|-----------------------------------|--------|----------|------|------|------|--------|----|
| Octopoda | <i>Octopus vulgaris</i> | 60.84 | 1666.51 | 26 | 0.86 | 0.97 | 94.89 | 20 |
| Octopoda | <i>Octopus vulgaris</i> | 61.45 | 880.15 | 28 | 0.83 | 0.98 | 84.72 | 20 |
| Octopoda | <i>Octopus vulgaris</i> | 0.002 | 283.00 | 15 | 0.82 | 0.99 | 131.01 | 21 |
| Oegopsida | <i>Dosidicus gigas</i> | 0.01 | 12200.00 | 10 | 0.88 | ND | 194.27 | 2 |
| Oegopsida | <i>Gonatus onyx</i> | 0.01 | 8.52 | 5 | 1.01 | 0.99 | 108.83 | 4 |
| Oegopsida | <i>Gonatus pyros</i> | 2.17 | 31.28 | 5 | 1.00 | 0.95 | 92.67 | 4 |
| Oegopsida | <i>Helicocranchia pfefferi</i> | 0.15 | 3.60 | 5 | 0.62 | 0.96 | 17.17 | 4 |
| Oegopsida | <i>Histioteuthis heteropsis</i> | 0.23 | 150.00 | 5 | 0.78 | 0.97 | 19.03 | 4 |
| Oegopsida | <i>Illex illecebrosus</i> | 200.00 | 550.00 | 15 | 0.73 | 0.88 | 320.23 | 9 |
| Oegopsida | <i>Illex illecebrosus</i> | 380.00 | 520.00 | 15 | 0.82 | 0.83 | 275.44 | 10 |
| Oegopsida | <i>Liocranchia valdivia</i> | 0.02 | 21.28 | 5 | 0.84 | 0.97 | 11.24 | 4 |
| Oegopsida | <i>Onychoteuthis banksii</i> | ND | ND | 20 | 0.84 | ND | ND | 23 |
| Oegopsida | <i>Sthenoteuthis oualaniensis</i> | 22.00 | 750.00 | 29.5 | 0.78 | ND | 546.35 | 31 |
| Oegopsida | <i>Sthenoteuthis pteropus</i> | 6.00 | 1300.00 | 27 | 0.87 | ND | 631.09 | 31 |
| Sepiida | <i>Sepia officinalis</i> | 1.29 | 41.88 | 21 | 0.84 | 0.87 | 134.56 | 24 |
| Sepiida | <i>Sepia officinalis</i> * | 0.3 | 80.35 | 20 | 0.76 | 0.99 | 139.80 | 25 |
| Sepiida | <i>Sepia officinalis</i> * | 0.3 | 80.35 | 20 | 0.74 | 0.99 | 362.15 | 25 |
| Sepiida | <i>Sepia officinalis</i> | 0.12 | 1500.00 | 17 | 0.91 | 0.98 | 116.48 | 26 |
| Sepiida | <i>Sepia officinalis</i> | 0.10 | 26.00 | 15 | 0.85 | 0.99 | 104.69 | 21 |
| Sepiida | <i>Sepia officinalis</i> | 15.00 | 496.00 | 0 | 0.79 | 0.99 | 19.01 | 27 |
| Vampyromorpha | <i>Vampyroteuthis infernalis</i> | 0.41 | 1050.00 | 5 | 0.72 | 0.97 | 1.66 | 4 |

* Indicates wet mass converted from dry mass.

Table S4. Cephalopod orders, length ranges, mass-length (b_L) scaling exponents, and correlation coefficients (r) of mass-length regressions of the species included in comparative analyses.

| Order | Species | Lower length of range (mm) | Upper length of range (mm) | b_L | Correlation coefficient (r) | Reference |
|-------------|---------------------------------|----------------------------|----------------------------|-------|---------------------------------|-----------|
| Idiosepiida | <i>Idiosepius notoides</i> | 3.50 | 20.00 | 2.450 | 0.94 | 71 |
| Idiosepiida | <i>Idiosepius notoides</i> | 5.00 | 16.00 | 2.280 | 0.96 | 71 |
| Myopsida | <i>Alloteuthis media</i> | 35.00 | 99.00 | 2.180 | 0.99 | 72 |
| Myopsida | <i>Alloteuthis subulata</i> | 10.41 | 200.00 | 1.195 | 0.91 | 34 |
| Myopsida | <i>Alloteuthis subulata</i> | 10.41 | 200.00 | 1.772 | 0.89 | 34 |
| Myopsida a | <i>Alloteuthis subulata</i> | 10.41 | 200.00 | 1.835 | 0.96 | 34 |
| Myopsida | <i>Alloteuthis subulata</i> | 7.64 | 149.31 | 1.825 | 0.96 | 34 |
| Myopsida | <i>Alloteuthis subulata</i> | 7.64 | 149.31 | 1.592 | 0.91 | 34 |
| Myopsida | <i>Alloteuthis subulata</i> | 7.64 | 149.31 | 1.392 | 0.95 | 34 |
| Myopsida | <i>Alloteuthis subulata</i> | 17.00 | 33.00 | 2.145 | 0.80 | 73 |
| Myopsida | <i>Doryteuthis pleii</i> | 9.88 | 88.02 | 1.952 | 0.90 | 74 |
| Myopsida | <i>Doryteuthis pleii</i> | 9.88 | 88.02 | 1.581 | 0.92 | 74 |
| Myopsida | <i>Doryteuthis pleii</i> | 9.88 | 88.02 | 1.963 | 0.95 | 74 |
| Myopsida | <i>Doryteuthis pleii</i> | 46.00 | 259.00 | 2.074 | 0.90 | 75 |
| Myopsida | <i>Doryteuthis pleii</i> | 11.00 | 353.00 | 1.894 | 0.96 | 75 |
| Myopsida | <i>Doryteuthis sanpaulensis</i> | 9.88 | 88.02 | 2.422 | 0.98 | 74 |
| Myopsida | <i>Doryteuthis sanpaulensis</i> | 9.88 | 88.02 | 2.356 | 0.98 | 74 |
| Myopsida | <i>Doryteuthis sanpaulensis</i> | 9.88 | 88.02 | 2.764 | 0.90 | 74 |
| Myopsida | <i>Loligo forbesii</i> | 50.00 | 250.00 | 2.011 | 0.92 | 76 |
| Myopsida | <i>Loligo forbesii</i> | 30.00 | 170.00 | 2.546 | 0.92 | 76 |
| Myopsida | <i>Loligo forbesii</i> | 65.00 | 380.00 | 2.443 | 0.99 | 77 |
| Myopsida | <i>Loligo forbesii</i> | 70.00 | 685.00 | 2.566 | 0.99 | 77 |
| Myopsida | <i>Loligo forbesii</i> | 21.00 | 425.00 | 2.152 | 0.95 | 78 |

| | | | | | | |
|----------|------------------------|--------|--------|-------|------|----|
| Myopsida | <i>Loligo forbesii</i> | 30.00 | 352.00 | 2.593 | 0.99 | 79 |
| Myopsida | <i>Loligo forbesii</i> | 27.00 | 642.00 | 2.581 | 0.99 | 79 |
| Myopsida | <i>Loligo forbesii</i> | 50.00 | 410.00 | 2.429 | 0.99 | 80 |
| Myopsida | <i>Loligo forbesii</i> | 50.00 | 590.00 | 2.289 | 0.99 | 80 |
| Myopsida | <i>Loligo forbesii</i> | 20.20 | 640.20 | 2.420 | 0.99 | 81 |
| Myopsida | <i>Loligo forbesii</i> | 241.10 | 935.60 | 2.253 | 0.97 | 81 |
| Myopsida | <i>Loligo forbesii</i> | 6.02 | 40.23 | 2.492 | 0.99 | 81 |
| Myopsida | <i>Loligo forbesii</i> | 3.16 | 35.04 | 2.476 | 0.99 | 81 |
| Myopsida | <i>Loligo forbesii</i> | ND | 46.84 | 2.448 | 0.98 | 81 |
| Myopsida | <i>Loligo forbesii</i> | ND | 46.09 | 2.438 | 0.95 | 81 |
| Myopsida | <i>Loligo forbesii</i> | ND | ND | 2.408 | 0.98 | 81 |
| Myopsida | <i>Loligo forbesii</i> | 9.97 | 61.11 | 2.459 | 0.99 | 81 |
| Myopsida | <i>Loligo forbesii</i> | 9.97 | 61.11 | 2.350 | 0.99 | 81 |
| Myopsida | <i>Loligo forbesii</i> | ND | ND | 1.899 | 0.93 | 81 |
| Myopsida | <i>Loligo vulgaris</i> | 65.00 | 605.00 | 2.380 | 0.99 | 82 |
| Myopsida | <i>Loligo vulgaris</i> | 75.00 | 345.00 | 2.430 | 0.99 | 82 |
| Myopsida | <i>Loligo vulgaris</i> | 55.00 | 225.00 | 2.580 | 0.99 | 82 |
| Myopsida | <i>Loligo vulgaris</i> | 55.00 | 270.00 | 2.572 | 0.96 | 83 |
| Myopsida | <i>Loligo vulgaris</i> | 65.00 | 385.00 | 2.370 | 0.99 | 77 |
| Myopsida | <i>Loligo vulgaris</i> | 71.00 | 475.00 | 2.539 | 0.99 | 77 |
| Myopsida | <i>Loligo vulgaris</i> | ND | 440.00 | 2.200 | 0.97 | 84 |
| Myopsida | <i>Loligo vulgaris</i> | ND | 360.00 | 2.380 | 0.97 | 84 |
| Myopsida | <i>Loligo vulgaris</i> | ND | 430.00 | 2.410 | 0.98 | 84 |
| Myopsida | <i>Loligo vulgaris</i> | ND | 328.00 | 2.540 | 0.99 | 84 |
| Myopsida | <i>Loligo vulgaris</i> | ND | 640.00 | 2.470 | 0.98 | 84 |
| Myopsida | <i>Loligo vulgaris</i> | ND | 362.00 | 2.560 | 0.99 | 84 |
| Myopsida | <i>Loligo vulgaris</i> | ND | 470.00 | 2.590 | 0.98 | 84 |

| | | | | | | |
|----------|--------------------------------|-------|--------|-------|------|----|
| Myopsida | <i>Loligo vulgaris</i> | ND | 275.00 | 2.810 | 0.98 | 84 |
| Myopsida | <i>Loligo vulgaris</i> | 17.00 | 310.00 | 2.418 | 0.99 | 85 |
| Myopsida | <i>Loliolus noctiluca</i> | ND | ND | 2.530 | 0.96 | 35 |
| Myopsida | <i>Loliolus noctiluca</i> | ND | ND | 2.640 | 0.98 | 35 |
| Myopsida | <i>Loliolus noctiluca</i> | ND | ND | 2.430 | 0.95 | 35 |
| Myopsida | <i>Loliolus noctiluca</i> | ND | ND | 2.460 | 0.96 | 35 |
| Myopsida | <i>Loliolus noctiluca</i> | ND | ND | 2.070 | 0.90 | 35 |
| Myopsida | <i>Loliolus noctiluca</i> | ND | ND | 2.700 | 0.98 | 35 |
| Myopsida | <i>Lolliguncula brevis</i> | 9.10 | 72.10 | 2.440 | 0.95 | 86 |
| Myopsida | <i>Lolliguncula brevis</i> | 29.00 | 66.00 | 2.555 | 0.96 | 74 |
| Myopsida | <i>Lolliguncula brevis</i> | 20.00 | 47.00 | 2.422 | 0.82 | 74 |
| Myopsida | <i>Lolliguncula diomedea</i> | 29.00 | 103.00 | 2.948 | 0.97 | 87 |
| Myopsida | <i>Lolliguncula diomedea</i> | 25.00 | 106.00 | 2.013 | 0.92 | 87 |
| Myopsida | <i>Lolliguncula panamensis</i> | 25.00 | 83.00 | 2.670 | 0.99 | 87 |
| Myopsida | <i>Lolliguncula panamensis</i> | 27.00 | 106.00 | 2.809 | 0.99 | 87 |
| Myopsida | <i>Sepioteuthis lessoniana</i> | 5.00 | 214.00 | 2.420 | ND | 88 |
| Myopsida | <i>Sepioteuthis lessoniana</i> | 38.00 | 255.00 | 2.459 | 0.97 | 89 |
| Myopsida | <i>Sepioteuthis lessoniana</i> | 40.00 | 260.00 | 2.512 | 0.99 | 90 |
| Myopsida | <i>Sepioteuthis lessoniana</i> | 38.00 | 243.00 | 2.491 | 0.99 | 90 |
| Myopsida | <i>Uroteuthis chinensis</i> | 12.00 | 94.00 | 2.579 | 0.93 | 91 |
| Myopsida | <i>Uroteuthis chinensis</i> | 11.00 | 438.00 | 2.230 | 0.97 | 92 |
| Myopsida | <i>Uroteuthis duvaucelii</i> | 33.00 | 274.00 | 2.193 | 0.97 | 93 |
| Myopsida | <i>Uroteuthis duvaucelii</i> | 50.00 | 265.00 | 1.945 | 0.97 | 94 |
| Myopsida | <i>Uroteuthis duvaucelii</i> | 60.00 | 155.00 | 2.233 | 0.92 | 94 |
| Myopsida | <i>Uroteuthis duvaucelii</i> | 58.00 | 366.00 | 1.953 | 0.99 | 95 |
| Myopsida | <i>Uroteuthis duvaucelii</i> | 67.00 | 228.00 | 2.242 | 0.96 | 95 |
| Myopsida | <i>Uroteuthis duvaucelii</i> | 21.00 | 240.00 | 1.377 | 0.98 | 96 |

| | | | | | | |
|----------|-------------------------------|-------|--------|-------|------|-----------------------|
| Myopsida | <i>Uroteuthis duvaucelii</i> | ND | ND | 2.241 | ND | 38 |
| Myopsida | <i>Uroteuthis duvaucelii</i> | ND | ND | 2.399 | ND | 38 |
| Myopsida | <i>Uroteuthis edulis</i> | 23.00 | 405.00 | 2.426 | 0.98 | 97 |
| Myopsida | <i>Uroteuthis edulis</i> | 26.00 | 273.00 | 2.485 | 0.98 | 97 |
| Myopsida | <i>Japetella diaphana</i> | 6.10 | 75.99 | 2.749 | 0.97 | Thomas K., per. comm. |
| Myopsida | <i>Bathypolypus sponsalis</i> | 25.00 | 95.00 | 2.620 | 0.90 | 72 |
| Myopsida | <i>Eledone cirrhosa</i> | 12.50 | 120.00 | 2.150 | 0.83 | 98 |
| Myopsida | <i>Eledone cirrhosa</i> | 12.50 | 145.00 | 2.460 | 0.88 | 98 |
| Octopoda | <i>Eledone cirrhosa</i> | 22.00 | 115.00 | 3.180 | 0.98 | 72 |
| Octopoda | <i>Eledone cirrhosa</i> | 74.00 | 154.00 | 2.379 | 0.87 | 99 |
| Octopoda | <i>Eledone cirrhosa</i> | 69.00 | 191.00 | 2.599 | 0.92 | 99 |
| Octopoda | <i>Eledone cirrhosa</i> | 56.00 | 158.00 | 2.611 | 0.92 | 99 |
| Octopoda | <i>Eledone cirrhosa</i> | 45.00 | 175.00 | 2.761 | 0.94 | 99 |
| Octopoda | <i>Eledone cirrhosa</i> | 50.00 | 139.00 | 2.295 | 0.92 | 99 |
| Octopoda | <i>Eledone cirrhosa</i> | 55.00 | 160.00 | 2.731 | 0.94 | 99 |
| Octopoda | <i>Eledone cirrhosa</i> | 36.70 | 96.18 | 2.672 | 0.92 | 73 |
| Octopoda | <i>Eledone moschata</i> | 27.00 | 150.00 | 2.836 | 0.95 | 100 |
| Octopoda | <i>Eledone moschata</i> | 42.00 | 206.00 | 2.428 | 0.80 | 83 |
| Octopoda | <i>Eledone moschata</i> | 33.00 | 117.00 | 2.330 | 0.91 | 101 |
| Octopoda | <i>Eledone moschata</i> | 38.00 | 170.00 | 2.910 | 0.98 | 72 |
| Octopoda | <i>Eledone moschata</i> | 32.00 | 140.00 | 2.715 | 0.95 | 102 |
| Octopoda | <i>Eledone moschata</i> | 40.00 | 150.00 | 2.702 | 0.96 | 103 |
| Octopoda | <i>Octopus bimaculoides</i> | 7.10 | 140.00 | 3.060 | 0.99 | 44 |
| Octopoda | <i>Octopus bimaculoides</i> | 6.00 | 147.00 | 2.940 | 0.99 | 44 |
| Octopoda | <i>Octopus cyanea</i> | 40.00 | 200.00 | 2.752 | 0.86 | 104 |
| Octopoda | <i>Octopus cyanea</i> | 30.00 | 240.00 | 2.255 | 0.83 | 104 |
| Octopoda | <i>Octopus cyanea</i> | 40.00 | 170.00 | 2.500 | 0.87 | 104 |

| | | | | | | |
|-----------|---------------------------------|--------|---------|-------|------|------------------------|
| Octopoda | <i>Octopus cyanea</i> | 80.00 | 350.00 | 2.170 | 0.92 | 105 |
| Octopoda | <i>Octopus cyanea</i> | 47.03 | 176.24 | 2.575 | 0.93 | 106 |
| Octopoda | <i>Octopus cyanea</i> | 47.97 | 174.29 | 2.636 | 0.94 | 106 |
| Octopoda | <i>Octopus digueti</i> | 5.37 | 57.62 | 2.930 | 0.99 | 107 |
| Octopoda | <i>Octopus joubini</i> | 5.00 | 10.00 | 3.680 | 0.99 | 47 |
| Octopoda | <i>Octopus joubini</i> | 14.00 | 34.00 | 3.170 | 0.99 | 47 |
| Octopoda | <i>Octopus macropus</i> | 60.00 | 210.00 | 2.592 | 0.96 | 83 |
| Octopoda | <i>Octopus maya</i> | 4.00 | 28.00 | 3.272 | 0.99 | 108 |
| Octopoda | <i>Octopus mimus</i> | 280.00 | 1150.00 | 2.000 | 0.87 | 109 |
| Octopoda | <i>Octopus mimus</i> | 240.00 | 1070.00 | 2.446 | 0.84 | 109 |
| Octopoda | <i>Octopus mimus</i> | 280.00 | 1150.00 | 2.220 | 0.83 | 109 |
| Octopoda | <i>Octopus salutii</i> | 50.00 | 120.00 | 2.190 | 0.85 | 72 |
| Octopoda | <i>Octopus salutii</i> | 35.00 | 165.00 | 2.509 | 0.93 | 110 |
| Octopoda | <i>Octopus vulgaris</i> | 40.00 | 228.00 | 3.200 | 0.97 | 83 |
| Octopoda | <i>Octopus vulgaris</i> | 65.00 | 264.50 | 2.915 | 0.97 | 111 |
| Octopoda | <i>Octopus vulgaris</i> | 135.00 | ND | 2.660 | 0.91 | 112 |
| Octopoda | <i>Octopus vulgaris</i> | 100.00 | 248.00 | 2.340 | 0.91 | 112 |
| Octopoda | <i>Octopus vulgaris</i> | 50.00 | 170.00 | 2.890 | 0.94 | 72 |
| Octopoda | <i>Octopus vulgaris</i> | ND | ND | 2.580 | 0.94 | 113 |
| Octopoda | <i>Octopus vulgaris</i> | 80.00 | 350.00 | 2.170 | 0.86 | 105 |
| Octopoda | <i>Octopus vulgaris</i> | 46.74 | 215.05 | 2.800 | 0.97 | 114 |
| Octopoda | <i>Pteroctopus tetracirrhus</i> | 55.00 | 135.00 | 3.340 | 0.91 | 72 |
| Octopoda | <i>Scaergus unircirrhus</i> | 30.00 | 105.00 | 2.520 | 0.94 | 72 |
| Oegopsida | <i>Histioteuthis bonnellii</i> | 41.00 | 155.00 | 2.990 | 0.98 | 72 |
| Oegopsida | <i>Histioteuthis heteropsis</i> | 16.93 | 71.65 | 2.935 | 0.98 | Thomas K., pers. comm. |
| Oegopsida | <i>Histioteuthis miranda</i> | 130.00 | 290.00 | 2.200 | 0.87 | 55 |
| Oegopsida | <i>Histioteuthis miranda</i> | 125.00 | 294.00 | 1.860 | 0.88 | 55 |

| | | | | | | |
|-----------|------------------------------|--------|--------|-------|------|-----|
| Oegopsida | <i>Histioteuthis reversa</i> | 25.00 | 120.00 | 2.420 | 0.97 | 72 |
| Oegopsida | <i>Dosidicus gigas</i> | 10.30 | 196.00 | 2.441 | 0.99 | 115 |
| Oegopsida | <i>Dosidicus gigas</i> | 145.00 | 794.00 | 3.220 | 0.98 | 116 |
| Oegopsida | <i>Dosidicus gigas</i> | 550.00 | 800.00 | 3.053 | 0.89 | 87 |
| Oegopsida | <i>Dosidicus gigas</i> | 150.00 | 570.00 | 3.066 | 0.99 | 87 |
| Oegopsida | <i>Dosidicus gigas</i> | 2.80 | 67.80 | 2.410 | 0.98 | 117 |
| Oegopsida | <i>Illex argentinus</i> | 61.00 | 356.00 | 2.809 | 0.98 | 118 |
| Oegopsida | <i>Illex coindetii</i> | 80.00 | 360.00 | 2.760 | 0.94 | 119 |
| Oegopsida | <i>Illex coindetii</i> | 35.00 | 352.00 | 2.830 | 0.96 | 119 |
| Oegopsida | <i>Illex coindetii</i> | 24.00 | 286.00 | 2.760 | 0.96 | 119 |
| Oegopsida | <i>Illex coindetii</i> | 70.00 | 240.00 | 3.170 | 0.91 | 119 |
| Oegopsida | <i>Illex coindetii</i> | 42.00 | 182.00 | 3.250 | 0.95 | 119 |
| Oegopsida | <i>Illex coindetii</i> | 47.00 | 217.00 | 3.300 | 0.95 | 119 |
| Oegopsida | <i>Illex coindetii</i> | 45.00 | 245.00 | 3.391 | 0.93 | 120 |
| Oegopsida | <i>Illex coindetii</i> | 50.00 | 175.00 | 3.041 | 0.96 | 120 |
| Oegopsida | <i>Illex coindetii</i> | 32.00 | 96.00 | 2.540 | 0.97 | 121 |
| Oegopsida | <i>Illex coindetii</i> | 32.00 | 187.00 | 2.950 | 0.98 | 121 |
| Oegopsida | <i>Illex coindetii</i> | 69.00 | 170.00 | 4.078 | 0.95 | 83 |
| Oegopsida | <i>Illex coindetii</i> | 60.00 | 279.00 | 3.567 | 0.97 | 122 |
| Oegopsida | <i>Illex coindetii</i> | 80.00 | 379.00 | 3.099 | 0.98 | 122 |
| Oegopsida | <i>Illex coindetii</i> | 60.00 | 239.00 | 3.579 | 0.96 | 122 |
| Oegopsida | <i>Illex coindetii</i> | 60.00 | 339.00 | 3.124 | 0.98 | 122 |
| Oegopsida | <i>Illex coindetii</i> | 60.00 | 279.00 | 3.268 | 0.94 | 123 |
| Oegopsida | <i>Illex coindetii</i> | 60.00 | 379.00 | 2.883 | 0.95 | 123 |
| Oegopsida | <i>Illex coindetii</i> | 46.00 | 279.00 | 2.910 | 0.95 | 124 |
| Oegopsida | <i>Illex coindetii</i> | 46.00 | 379.00 | 3.163 | 0.95 | 124 |
| Oegopsida | <i>Illex coindetii</i> | 46.00 | 202.00 | 2.098 | 0.97 | 124 |

| | | | | | | |
|-----------|-----------------------------------|--------|--------|-------|------|-----|
| Oegopsida | <i>Illex coindetii</i> | 46.00 | 294.00 | 3.022 | 0.96 | 124 |
| Oegopsida | <i>Illex coindetii</i> | 76.00 | 196.00 | 3.200 | 0.97 | 72 |
| Oegopsida | <i>Illex coindetii</i> | 61.00 | 216.00 | 3.114 | 0.96 | 125 |
| Oegopsida | <i>Illex coindetii</i> | ND | ND | 3.210 | 0.98 | 126 |
| Oegopsida | <i>Illex coindetii</i> | ND | ND | 2.832 | 0.99 | 126 |
| Oegopsida | <i>Illex coindetii</i> | ND | ND | 3.190 | 0.98 | 126 |
| Oegopsida | <i>Illex coindetii</i> | ND | ND | 2.788 | 0.99 | 126 |
| Oegopsida | <i>Illex coindetii</i> | ND | ND | 3.239 | 0.97 | 126 |
| Oegopsida | <i>Illex coindetii</i> | ND | ND | 2.997 | 0.98 | 126 |
| Oegopsida | <i>Illex coindetii</i> | ND | ND | 3.018 | 0.94 | 126 |
| Oegopsida | <i>Illex coindetii</i> | ND | ND | 2.886 | 0.95 | 126 |
| Oegopsida | <i>Illex coindetii</i> | ND | ND | 3.085 | 0.96 | 126 |
| Oegopsida | <i>Illex coindetii</i> | ND | ND | 2.705 | 0.97 | 126 |
| Oegopsida | <i>Illex illecebrosus</i> | 150.00 | 270.00 | 3.600 | 0.98 | 127 |
| Oegopsida | <i>Illex illecebrosus</i> | 150.00 | 290.00 | 3.230 | 0.99 | 127 |
| Oegopsida | <i>Illex illecebrosus</i> | 150.00 | 260.00 | 3.730 | 0.96 | 127 |
| Oegopsida | <i>Illex illecebrosus</i> | 170.00 | 310.00 | 3.390 | 0.98 | 127 |
| Oegopsida | <i>Illex illecebrosus</i> | 64.00 | 250.00 | 3.045 | 0.97 | 128 |
| Oegopsida | <i>Illex illecebrosus</i> | 34.00 | 68.00 | 2.263 | 0.88 | 128 |
| Oegopsida | <i>Illex illecebrosus</i> | 48.00 | 450.00 | 2.720 | 0.93 | 78 |
| Oegopsida | <i>Illex illecebrosus</i> | 41.00 | 425.00 | 2.791 | 0.93 | 78 |
| Oegopsida | <i>Illex illecebrosus</i> | 65.00 | 402.00 | 2.910 | 0.97 | 78 |
| Oegopsida | <i>Illex illecebrosus</i> | 21.00 | 355.00 | 2.456 | 0.85 | 78 |
| Oegopsida | <i>Illex illecebrosus</i> | 161.00 | 181.00 | 2.850 | 0.88 | 78 |
| Oegopsida | <i>Ommastrephes bartramii</i> | 195.00 | 660.00 | 3.044 | ND | 58 |
| Oegopsida | <i>Sthenoteuthis oualaniensis</i> | 98.00 | 270.00 | 2.670 | 0.94 | 129 |
| Oegopsida | <i>Sthenoteuthis oualaniensis</i> | 91.00 | 165.00 | 3.050 | 0.98 | 129 |

| | | | | | | |
|-----------|--------------------------------------|--------|--------|-------|------|-----|
| Oegopsida | <i>Sthenoteuthis oualaniensis</i> | 109.14 | 187.44 | 2.990 | 0.84 | 130 |
| Oegopsida | <i>Sthenoteuthis oualaniensis</i> | 34.87 | 966.67 | 3.150 | 0.98 | 130 |
| Oegopsida | <i>Sthenoteuthis pteropus</i> | 3.22 | 8.57 | 2.420 | ND | 131 |
| Oegopsida | <i>Sthenoteuthis pteropus</i> | 62.73 | 538.46 | 3.100 | ND | 131 |
| Oegopsida | <i>Todarodes sagittatus</i> | 81.00 | 418.00 | 3.310 | 0.99 | 72 |
| Oegopsida | <i>Todarodes sagittatus</i> | 100.00 | 280.00 | 2.845 | 0.99 | 132 |
| Oegopsida | <i>Todarodes sagittatus</i> | 100.00 | 350.00 | 2.991 | 0.99 | 132 |
| Oegopsida | <i>Todarodes sagittatus</i> | 71.00 | 348.00 | 3.167 | 0.99 | 133 |
| Oegopsida | <i>Todarodes sagittatus</i> | 81.00 | 418.00 | 3.313 | 0.99 | 134 |
| Oegopsida | <i>Todaropsis eblanae</i> | 39.00 | 250.00 | 2.505 | 0.96 | 135 |
| Oegopsida | <i>Todaropsis eblanae</i> | ND | ND | 2.570 | ND | 136 |
| Oegopsida | <i>Todaropsis eblanae</i> | ND | ND | 2.640 | ND | 136 |
| Oegopsida | <i>Todaropsis eblanae</i> | ND | ND | 2.670 | ND | 136 |
| Oegopsida | <i>Todaropsis eblanae</i> | 40.00 | 219.00 | 2.671 | 0.99 | 123 |
| Oegopsida | <i>Todaropsis eblanae</i> | 50.00 | 169.00 | 2.917 | 0.99 | 123 |
| Oegopsida | <i>Todaropsis eblanae</i> | 35.00 | 205.00 | 2.723 | 0.97 | 137 |
| Oegopsida | <i>Todaropsis eblanae</i> | 40.00 | 141.00 | 2.777 | 0.96 | 137 |
| Oegopsida | <i>Todaropsis eblanae</i> | ND | ND | 2.650 | ND | 136 |
| Oegopsida | <i>Todaropsis eblanae</i> | ND | ND | 2.560 | ND | 136 |
| Oegopsida | <i>Todaropsis eblanae</i> | ND | ND | 2.704 | ND | 136 |
| Oegopsida | <i>Todaropsis eblanae</i> | 80.00 | 290.00 | 2.410 | 0.93 | 138 |
| Oegopsida | <i>Todaropsis eblanae</i> | 80.00 | 230.00 | 2.150 | 0.90 | 138 |
| Oegopsida | <i>Todaropsis eblanae</i> | 50.00 | 170.00 | 2.854 | 0.99 | 139 |
| Oegopsida | <i>Todaropsis eblanae</i> | 50.00 | 200.00 | 2.660 | 0.98 | 139 |
| Oegopsida | <i>Ancistroteuthis lichtensteini</i> | 50.00 | 125.00 | 2.600 | 0.99 | 72 |
| Oegopsida | <i>Onychoteuthis banksii</i> | 9.25 | 148.73 | 2.184 | 0.98 | 60 |
| Oegopsida | <i>Onychoteuthis borealijaponica</i> | ND | ND | 3.015 | 0.99 | 59 |

| | | | | | | |
|-----------|--------------------------------------|--------|--------|-------|------|-----|
| Oegopsida | <i>Onychoteuthis borealijaponica</i> | ND | ND | 2.596 | 0.98 | 59 |
| Oegopsida | <i>Onychoteuthis borealijaponica</i> | ND | ND | 2.915 | 0.99 | 59 |
| Oegopsida | <i>Ornithoteuthis antillarum</i> | 1.80 | 138.00 | 2.230 | 0.97 | 60 |
| Oegopsida | <i>Sepia aculeata</i> | ND | ND | 2.912 | 0.94 | 140 |
| Oegopsida | <i>Sepia aculeata</i> | ND | ND | 3.208 | 0.96 | 140 |
| Oegopsida | <i>Sepia aculeata</i> | ND | ND | 2.385 | 0.97 | 140 |
| Oegopsida | <i>Sepia aculeata</i> | ND | ND | 2.503 | 0.98 | 140 |
| Sepiida | <i>Sepia aculeata</i> | 21.00 | 140.00 | 2.505 | 0.98 | 96 |
| Sepiida | <i>Sepia elegans</i> | 3.30 | 61.00 | 2.272 | 0.96 | 141 |
| Sepiida | <i>Sepia elegans</i> | 3.30 | 67.00 | 2.311 | 0.95 | 141 |
| Sepiida | <i>Sepia elegans</i> | 28.00 | 54.00 | 2.150 | 0.97 | 142 |
| Sepiida | <i>Sepia elegans</i> | 27.00 | 63.00 | 2.285 | 0.97 | 142 |
| Sepiida | <i>Sepia pharaonis</i> | 10.00 | 240.00 | 2.650 | 0.99 | 143 |
| Sepiida | <i>Sepia pharaonis</i> | 10.00 | 240.00 | 2.600 | 0.99 | 143 |
| Sepiida | <i>Sepia pharaonis</i> | 90.00 | 150.00 | 2.600 | ND | 144 |
| Sepiida | <i>Sepia pharaonis</i> | 90.00 | 170.00 | 2.629 | ND | 144 |
| Sepiida | <i>Sepia pharaonis</i> | 80.00 | 430.00 | 2.693 | ND | 144 |
| Sepiida | <i>Sepia pharaonis</i> | 51.00 | 370.00 | 2.555 | 0.99 | 144 |
| Sepiida | <i>Sepia pharaonis</i> | 130.00 | 334.00 | 2.506 | ND | 144 |
| Sepiida | <i>Sepia pharaonis</i> | 150.00 | 320.00 | 2.548 | ND | 144 |
| Sepiida | <i>Sepia officinalis</i> | 26.60 | 290.69 | 2.564 | ND | 145 |
| Sepiida | <i>Sepia officinalis</i> | 37.00 | 200.00 | 2.877 | 0.98 | 83 |
| Sepiida | <i>Sepia officinalis</i> | 11.00 | 67.00 | 2.730 | 0.99 | 25 |
| Sepiida | <i>Sepia pharaonis</i> | 34.00 | 173.00 | 2.890 | ND | 146 |
| Sepiida | <i>Sepia pharaonis</i> | 28.00 | 192.00 | 2.760 | ND | 146 |
| Sepiida | <i>Sepia pharaonis</i> | 7.00 | 104.00 | 2.200 | ND | 88 |
| Sepiida | <i>Sepia prashadi</i> | 45.00 | 125.00 | 2.199 | ND | 147 |

| | | | | | | |
|---------|----------------------------------|-------|-------|-------|------|-----|
| Sepiida | <i>Sepiella inermis</i> | 2.00 | 68.00 | 2.750 | ND | 88 |
| Sepiida | <i>Sepiella inermis</i> | 11.00 | 90.00 | 1.979 | 0.97 | 96 |
| Sepiida | <i>Heteroteuthis dispar</i> | 10.54 | 24.94 | 2.357 | 0.95 | 62 |
| Sepiida | <i>Neorossia caroli</i> | 30.00 | 62.00 | 2.300 | 0.94 | 72 |
| Sepiida | <i>Rossia macrosoma</i> | 5.45 | 59.80 | 2.819 | 0.99 | 73 |
| Sepiida | <i>Rossia macrosoma</i> | 8.00 | 72.00 | 2.273 | 0.98 | 148 |
| Sepiida | <i>Sepietta oweniana</i> | 15.00 | 30.00 | 1.290 | 0.82 | 68 |
| Sepiida | <i>Sepietta oweniana</i> | 18.00 | 34.00 | 1.610 | 0.84 | 68 |
| Sepiida | <i>Sepiola atlantica</i> | 4.98 | 26.20 | 2.302 | 0.91 | 73 |
| Sepiida | <i>Sepiola atlantica</i> | 10.00 | 19.20 | 2.750 | 0.95 | 149 |
| Sepiida | <i>Sepiola atlantica</i> | 10.00 | 20.70 | 2.457 | 0.96 | 149 |
| Sepiida | <i>Vampyroteuthis infernalis</i> | 9.88 | 88.02 | 3.330 | 0.99 | 70 |

References

- 1 Rosa, R. & Seibel, B.A. (2010). Voyage of the argonauts in the pelagic realm: physiological and behavioural ecology of the rare paper nautilus, *Argonauta nouryi*. *ICES J. Mar. Sci.*, 67, 1494–1500.
- 2 Trueblood, L.A. & Seibel, B.A. (2013). The jumbo squid, *Dosidicus gigas* (Ommastrephidae), living in oxygen minimum zones I: oxygen consumption rates and critical oxygen partial pressures. *Deep. Res. Part II Top. Stud. Oceanogr.*, 95, 218–224.
- 3 Seibel, B.A., Thuesen, E. V., Childress, J.J. & Gorodezky, L.A. (1997). Decline in pelagic cephalopod metabolism with habitat depth reflects differences in locomotory efficiency. *Biol. Bull.*, 192, 262–278.
- 4 Seibel, B.A. (2007). On the depth and scale of metabolic rate variation: scaling of oxygen consumption rates and enzymatic activity in the Class Cephalopoda (Mollusca). *J. Exp. Biol.*, 210, 1–11.
- 5 Farías, A., Uriarte, I., Hernández, J., Pino, S., Pascual, C., Caamal, C. *et al.* (2009). How size relates to oxygen consumption, ammonia excretion, and ingestion rates in cold (*Enteroctopus megalocyathus*) and tropical (*Octopus maya*) octopus species. *Mar. Biol.*, 156, 1547–1558.
- 6 Donnelly, J., Kawall, H., Geiger, S.P. & Torres, J.J. (2004). Metabolism of Antarctic micronektonic crustacea across a summer ice-edge bloom: respiration, composition, and enzymatic activity. *Deep. Res. Part II Top. Stud. Oceanogr.*, 51, 2225–2245.
- 7 Hunt, J.C. & Seibel, B.A. (2000). Life history of *Gonatus onyx* (Cephalopoda: Teuthoidea): ontogenetic changes in habitat, behavior and physiology. *Mar. Biol.*, 136, 543–552.
- 8 Belman, B.W. (1978). Respiration and the effects of pressure on the mesopelagic vertically migrating squid *Histioteuthis heteropsis*. *Limnol. Oceanogr.*, 23, 735–739.
- 9 Webber, D.M. & O’Dor, R.K. (1985). Respiration and swimming performance of short-finned squid (*Illex illecebrosus*). *NAFO Sci. Coun. Stud.*, 9, 133–138.
- 10 Webber, D.M. & O’Dor, R.K. (1986). Monitoring the metabolic rate and activity of free-swimming squid with telemetered jet pressure. *J. Exp. Biol.*,

- 224, 205–224.
- 11 Boucher-Rodoni, R. & Mangold, K. (1989). Respiration and nitrogen excretion by the squid *Loligo forbesi*. *Mar. Biol.*, 103, 333–338.
 - 12 Segawa, S. & Hanlon, R.T. (1988). Oxygen consumption and ammonia excretion rates in *Octopus maya*, *Loligo forbesi* and *Lolliguncula brevis* (Mollusca: Cephalopoda). *Mar. Behav. Physiol.*, 13, 389–400.
 - 13 Macy, W.K. (1980). The ecology of the common squid *Loligo pealei* Lesueur, 1821 in Rhode Island waters. Ph. D Thesis, University of Rhode Island, USA, 1980.
 - 14 Bartol, I.K., Mann, R. & Patterson, M.R. (2001). Aerobic respiratory costs of swimming in the negatively buoyant brief squid *Lolliguncula brevis*. *J. Exp. Biol.*, 204, 3639–3653.
 - 15 Maginniss, L.A. & Wells, M.J. (1969). The oxygen consumption of *Octopus cyanea*. *J. Exp. Biol.*, 51, 607–613.
 - 16 Briceno F.; Mascaro, M.. R.C. (2010). Energy demand during exponential growth of *Octopus maya*: exploring the effect of age and weight. *ICES J. Mar. Sci.*, 67, 1501–1508.
 - 17 Van Heukelem, W.F. (1976). Growth, bioenergetics and life-span of *Octopus cyanea* and *Octopus maya*. Ph. D. thesis, University of Hawaii, USA, 1976.
 - 18 Segawa, S. & Nomoto, A. (2002). Laboratory growth, feeding, oxygen consumption and ammonia excretion of *Octopus ocellatus*. *Bull. Mar. Sci.*, 71, 801–813.
 - 19 Cerezo Valverde, J. & García García, B. (2004). Influence of body weight and temperature on post-prandial oxygen consumption of common octopus (*Octopus vulgaris*). *Aquaculture.*, 233, 599–613.
 - 20 Katsanevakis, S., Stephanopoulou, S., Miliou, H., Moraitou-Apostolopoulou, M. & Verriopoulos, G. (2005). Oxygen consumption and ammonia excretion of *Octopus vulgaris* (Cephalopoda) in relation to body mass and temperature. *Mar. Biol.*, 146, 725–732.
 - 21 Lopes, V.M. (2012). Is there a universal allometric scaling of metabolism? Cephalopods as a case study. MS Thesis, University of Lisbon, Portugal, 2012.
 - 22 Petza, D., Katsanevakis, S. & Verriopoulos, G. (2006). Experimental evaluation of the energy balance in *Octopus vulgaris*, fed ad libitum on a high-lipid diet. *Mar. Biol.*, 148, 827–832.

- 23 Shulman, G.E., Chesalin, M. V., Abolmasova, G.I., Yuneva, T. V. & Kideys, A. (2002). Metabolic strategy in pelagic squid of genus *Sthenoteuthis* (Ommastrephidae) as the basis of high abundance and productivity: an overview of the Soviet investigations. *Bull. Mar. Sci.*, 71, 815–836.
- 24 Domingues, P., Ferreira, A., Marquez, L., Andrade, J.P., López, N. & Rosas, C. (2008). Growth, absorption and assimilation efficiency by mature cuttlefish (*Sepia officinalis*) fed with alternative and artificial diets. *Aquac. Int.*, 16, 215–229.
- 25 Grigoriou, P. & Richardson, C.A. (2009). Effect of body mass, temperature and food deprivation on oxygen consumption rate of common cuttlefish *Sepia officinalis*. *Mar. Biol.*, 156, 2473–2481.
- 26 Johansen, K., Brix, O., Kornerup, S. & Lykkeboe, G. (1982). Factors affecting O₂-uptake in the cuttlefish, *Sepia officinalis*. *J. Mar. Biol. Assoc. UK.*, 62, 187–191.
- 27 Melzner, F., Bock, C. & Pörtner, H.O. (2007). Allometry of thermal limitation in the cephalopod *Sepia officinalis*. *Comp. Biochem. Physiol. A.*, 146, 149–154.
- 28 Segawa, S. (1991). Body size and oxygen consumption rate of the oval squid *Sepioteuthis lessoniana*. *Nippon Suisan Gakk.*, 57, 1651–1656.
- 29 Segawa, S. (1995). Effect of temperature on oxygen consumption of juvenile oval squid *Sepioteuthis lessoniana*. *Fish. Sci.*, 61, 743–746.
- 30 Jacoby, C.A., Youngbluth, M.J., Frost, J.R., Flood, P.R., Uiblein, F., Båmstedt, U. et al. (2009). Vertical distribution, behavior, chemical composition and metabolism of *Stauroteuthis syrtensis* (Octopoda: Cirrata) in the northwest Atlantic. *Aquat. Biol.*, 5, 13–22.
- 31 Zuyev, G., Nigmatullin, C., Chesalin, M. & Nesis, K. (2002). Main results of long-term worldwide studies on tropical nektonic oceanic squid genus *Sthenoteuthis*: an overview of the Soviet investigations. *Bull. Mar. Sci.*, 71, 1019–1060.
- 32 Wild, E., Wollesen, T., Haszprunar, G. & Heß, M. (2015). Comparative 3D microanatomy and histology of the eyes and central nervous systems in coleoid cephalopod hatchlings. *Org. Divers. Evol.*, 15, 37–64.
- 33 Jereb, P., Vecchione, M. & Roper, C.F.E. (2010). Family Loliginidae. In: *Cephalopods of the World: An Annotated Illustrated Catalogue of Cephalopod*

- Species Known to Date: Volume 2. Myopsid and Oegopsid Squids*, (eds. Jereb, P., & Roper, C.F.E.). No. 4, Vol, FAO Species Catalogue for Fishery Purposes, Rome, pp. 38–117.
- 34 Hastie, L.C., Nyegaard, M., Collins, M.A., Moreno, A., Pereira, J.M.F., Piatkowski, U. *et al.* (2009). Reproductive biology of the loliginid squid, *Alloteuthis subulata*, in the north-east Atlantic and adjacent waters. *Aquat. Living Resour.*, 22, 35–44.
- 35 Jackson, G.D. & Moltschaniwskyj, N.A. (2001). Temporal variation in growth rates and reproductive parameters in the small near-shore tropical squid *Loliolus noctiluca*; is cooler better? *Mar. Ecol. Prog. Ser.*, 218, 167–177.
- 36 Hanlon, R.T., Hixon, R.F. & Hulet, W.H. (1983). Survival, growth, and behavior of the loliginid squids *Loligo plei*, *Loligo pealei*, and *Lolliguncula brevis* (Mollusca: Cephalopoda) in closed sea water systems. *Biol. Bull.*, 165, 637–685.
- 37 Arizmendi-Rodríguez, D.I., Cruz-Escalona, V.H., Quiñonez-Velázquez, C. & Salinas-Zavala, C.A. (2011). Feeding habits of the Panama Brief Squid (*Lolliguncula panamensis*) in the Gulf of California, Mexico. *J. Fish. Aquat. Sci.*, 6, 194–201.
- 38 Silas, E.G., Rao, K.S., Sarvesan, R., Nair, P.K. & Meiyappan, M.M. (1982). The exploited squid and cuttlefish resources of India: a review. *Mar. Fish. Inf. Serv. Tech. Ext. Ser.*, 34, 1–16.
- 39 Yagi, M., Takeda, T., Matsuyama, M. & Oikawa, S. (2011). Prey capture by paralarvae of the squid *Uroteuthis (Photololigo) edulis* (Cephalopoda: Lolignidae) in captivity. *Aquac. Sci.*, 59, 643–647.
- 40 Voss, G.L. (1967). The biology and bathymetric distribution of deep-sea cephalopods. *Stud. Trop. Oceanogr.*, 5, 511–535.
- 41 Lefkaditou, E., Peristeraki, P., Bekas, P., Tserpes, G., Politou, C.Y. & Petrakis, G. (2003). Cephalopods distribution in the southern Aegean Sea. *Mediterr. Mar. Sci.*, 4, 79–86.
- 42 Boyle, P.R. (1983). *Eledone cirrhosa*. In: *Cephalopod Life Cycles. Volume 1. Species Accounts*, (ed. Boyle, P.R.). Academic Press, pp. 365–386.
- 43 Ortiz, N., Ré, M.E. & Márquez, F. (2006). First description of eggs, hatchlings and hatchling behaviour of *Enteroctopus megalocyathus* (Cephalopoda: Octopodidae). *J. Plankton Res.*, 28, 881–890.

- 44 Forsythe, J.W. & Hanlon, R.T. (1988). Effect of temperature on laboratory growth, reproduction and life span of *Octopus bimaculoides*. *Mar. Biol.*, 98, 369–379.
- 45 Doubleday, Z.A., Prowse, T.A.A., Arkhipkin, A., Pierce, G.J., Semmens, J., Steer, M. *et al.* (2016). Global proliferation of cephalopods. *Curr. Biol.*, 26, R406–R407.
- 46 Voight, J.R. (1992). Movement, injuries and growth of members of a natural population of the Pacific pygmy octopus, *Octopus digueti*. *J. Zool.*, 228, 247–264.
- 47 Forsythe, J.W. (1984). *Octopus joubini* (Mollusca: Cephalopoda): a detailed study of growth through the full life cycle in a closed seawater system. *J. Zool.*, 202, 393–417.
- 48 Hochberg, F.G. & Camacho-García, Y.E. (2009). Squids and octopuses. In: *Marine Biodiversity of Costa Rica, Central America*, (eds. Wehrtmann, I.S., & Cortés, J.). Springer Netherlands, pp. 399–408.
- 49 Defeo, O. & Carlos Castilla, J. (1998). Harvesting and economic patterns in the artisanal *Octopus mimus* (Cephalopoda) fishery in a northern Chile cove. *Fish. Res.*, 38, 121–130.
- 50 Quetglas, A., Ordines, F., González, M. & Franco, I. (2009). Life history of the bathyal octopus *Pteroctopus tetracirrhus* (Mollusca, Cephalopoda) in the Mediterranean Sea. *Deep. Res. Part I Oceanogr. Res. Pap.*, 56, 1379–1390.
- 51 Laptikhovsky, V., Salman, A., Önsoy, B., Akalin, M. & Ceylan, B. (2014). Reproduction in rare bathyal octopods *Pteroctopus tetracirrhus* and *Scaeguris unicolor* (Cephalopoda: Octopoda) in the east Mediterranean as an apparent response to extremely oligotrophic deep seas. *Deep. Res. Part I Oceanogr. Res. Pap.*, 92, 85–92.
- 52 Nigmatullin, C.M., Nesis, K.N. & Arkhipkin, A.I. (2001). A review of the biology of the jumbo squid *Dosidicus gigas* (Cephalopoda: Ommastrephidae). *Fish. Res.*, 54, 9–19.
- 53 Lu, C.C. & Clarke, M.R. (1975). Vertical distribution of cephalopods at 40 degrees N, 53 degrees N and 60 degrees N at 20 degrees W in the North Atlantic. *J. Mar. Biol. Assoc. UK.*, 55, 143–163.
- 54 Romeo, T., Battaglia, P., Pedà, C., Perzia, P., Consoli, P., Esposito, V. *et al.* (2012). Pelagic cephalopods of the central Mediterranean Sea determined by

- the analysis of the stomach content of large fish predators. *Helgol. Mar. Res.*, 66, 295–306.
- 55 Hoving, H.J.T. & Lipiński, M.R. (2009). Female reproductive biology, and age of deep-sea squid *Histioteuthis miranda* from southern Africa. *ICES J. Mar. Sci.*, 66, 1868–1872.
- 56 Quetglas, A., de Mesa, A., Ordines, F. & Grau, A. (2010). Life history of the deep-sea cephalopod family Histioteuthidae in the western Mediterranean. *Deep. Res. Part I Oceanogr. Res. Pap.*, 57, 999–1008.
- 57 Nicol, S. & O'dor, R.K. (1985). Predatory behaviour of squid (*Illex illecebrosus*) feeding on surface swarms of euphausiids. *Can. J. Zool.*, 63, 15–17.
- 58 Lefkaditou, E., Peristeraki, P., Chartosia, N. & Salman, A. (2011). Recent findings of *Ommastrephes bartramii* (Cephalopoda: Ommastrephidae) in the eastern Mediterranean and the implication on its range expansion. *Mediterr. Mar. Sci.*, 12, 413–428.
- 59 Bigelow, K.A. (1994). Age and growth of the oceanic squid *Onychoteuthis borealijaponica* in the North Pacific. *Fish. Bull.*, 92, 13–25.
- 60 Arkhipkin, A.I., Laptikhovsky, V. V, Bespyatykh, A. V & Murzov, S.A. (1998). Growth, reproduction and feeding of the tropical squid *Ornithoteuthis antillarum* (Cephalopoda, Ommastrephidae) from the central-east Atlantic. *Sci. Mar.*, 62, 273–288.
- 61 Rosa, R., Pereira, J. & Nunes, M.L. (2005). Biochemical composition of cephalopods with different life strategies, with special reference to a giant squid, *Architeuthis* sp. *Mar. Biol.*, 146, 739–751.
- 62 Hoving, H.J.T., Laptikhovsky, V., Piatkowski, U. & Önsoy, B. (2008). Reproduction in *Heteroteuthis dispar* (Rüppell, 1844) (Mollusca: Cephalopoda): a sepiolid reproductive adaptation to an oceanic lifestyle. *Mar. Biol.*, 154, 219–230.
- 63 Cuccu, D., Mereu, M., Cannas, R., Follesa, M.C., Cau, A. & Jereb, P. (2007). Egg clutch, sperm reservoirs and fecundity of *Neorossia caroli* (Cephalopoda: Sepiolidae) from the southern Sardinian Sea (Western Mediterranean). *J. Mar. Biol. Assoc. UK.*, 87, 971–976.
- 64 Laptikhovsky, V. V., Nigmatullin, C.M., Hoving, H.J.T., Onsoy, B., Salman, A., Zumholz, K. *et al.* (2008). Reproductive strategies in female polar and

- deep-sea bobtail squid genera *Rossia* and *Neorossia* (Cephalopoda: Sepiolidae). *Polar Biol.*, 31, 1499–1507.
- 65 Yoshida, M., Tsuneki, K. & Furuya, H. (2010). Molecular phylogeny among East-Asian cuttlefishes using three mitochondrial genes. In: *Cephalopods - Present and Past*, (eds. Tanabe, K., Shigeta, Y., & Hirano, H.). Tokyo University Press, Tokyo, pp. 15–21.
- 66 Cartron, L., Josef, N., Lerner, A., McCusker, S.D., Darmaillacq, A.S., Dickel, L. *et al.* (2013). Polarization vision can improve object detection in turbid waters by cuttlefish. *J. Exp. Mar. Bio. Ecol.*, 447, 80–85.
- 67 Nabhitabhata, J. & Ikeda, Y. (2014). *Sepioteuthis lessoniana*. In: *Cephalopod Culture*, (eds. Iglesias, J., Fuentes, L., & Villanueva, R.). Springer Netherlands, Dordrecht, pp. 315–347.
- 68 Giordano, D., Perdichizzi, A., Pirrera, L., Perdichizzi, F., Profeta, A., Busalacchi, B. *et al.* (2009). Distribution and biology of *Sepietta oweniana* (Pfeffer, 1908) (Cephalopoda: Sepiolidae) in the southern Tyrrhenian Sea (Central Mediterranean Sea). *Cah. Biol. Mar.*, 50, 1–10.
- 69 González, A.F., López, A., Guerra, A. & Barreiro, A. (1994). Diets of marine mammals stranded on the northwestern Spanish Atlantic coast with special reference to Cephalopoda. *Fish. Res.*, 21, 179–191.
- 70 Seibel, B.A., Thuesen, E. V & Childress, J.J. (1998). Flight of the vampire: ontogenetic gait-transition in *Vampyroteuthis infernalis* (Cephalopoda: Vampyromorpha). *J. Exp. Biol.*, 201, 2413–2424.
- 71 Tracey, S.R., Steer, M.A. & Pecl, G.T. (2003). Life history traits of the temperate mini-maximalist *Idiosepius notoides*, (Cephalopoda: Sepioidea). *J. Mar. Biol. Assoc. UK.*, 83, 1297–1300.
- 72 Merella, P., Quetglas, A., Alemany, F. & Carbonell, A. (1997). Length-weight relationship of fishes and cephalopods from the Balearic Islands. *Naga, ICLARM Q.*, July-Decem, 66–68.
- 73 Robinson, L.A., Greenstreet, S.P.R., Reiss, H., Callaway, R., Craeymeersch, J., de Boois, I. *et al.* (2010). Length–weight relationships of 216 North Sea benthic invertebrates and fish. *J. Mar. Biol. Assoc. UK.*, 90, 95–104.
- 74 Martins, R.S. & Perez, J.A.A. (2007). The ecology of loliginid squid in shallow waters around Santa Catarina Island, southern Brazil. *Bull. Mar. Sci.*, 80, 125–145.

- 75 Perez, J.A.A., de Aguiar, D.C. & Oliveira, U.C. (2002). Biology and population dynamics of the long-finned squid *Loligo plei* (Cephalopoda: Loliginidae) in southern Brazilian waters. *Fish. Res.*, 58, 267–279.
- 76 Emam, W.M., Saad, A.A., Riad, R. & ALwerfaly, H.A. (2014). Morphometric study and length-weight relationship on the squid *Loligo forbesi* from the Egyptian Mediterranean waters. *Int. J. Environ. Sci. Eng.*, 5, 1–13.
- 77 Guerra, A. & Rocha, F. (1994). The life history of *Loligo vulgaris* and *Loligo forbesi* (Cephalopoda: Loliginidae) in Galician waters (NW Spain). *Fish. Res.*, 21, 43–69.
- 78 Lange, A.H.T. & Johnson, K.L. (1978). Dorsal mantle length - total weight relationships of squid (*Loligo pealei* and *Illex illecebrosus*) from the Northwest Atlantic, off the coast of the United States. *NOAA Tech. Rep. NMFS SSRF (USA). No. 745.*, 1–13.
- 79 Moreno, A., Cunha, M. & Pereira, J.M.F. (1994). Population biology of veined squid (*Loligo forbesi*) and European squid (*Loligo vulgaris*) from the Portuguese coast. *Fish. Res.*, 21, 71–86.
- 80 Pierce, G.J., Boyle, P.R., Hastie, L.C. & Key, L. (1994). The life-history of *Loligo Forbesi* (Cephalopoda, Loliginidae) in Scottish waters. *Fish. Res.*, 21, 17–41.
- 81 Thomas, M., Challier, L., Santos, M.B., Pierce, G.J., Moreno, A., Pereira, J. *et al.* (2004). Spatial differences in biological characteristics of *Loligo forbesi* (Cephalopoda: Loliginidae) in the Northeast Atlantic. *ICES C. 2004/CC23.*, 1–7.
- 82 Coelho, M.L., Quintela, J., Bettencourt, V., Olavo, G. & Villa, H. (1994). Population structure, maturation patterns and fecundity of the squid *Loligo vulgaris* from southern Portugal. *Fish. Res.*, 21, 87–102.
- 83 Duysak, Ö., Sendão, J., Borges, T., Türeli, C. & Erden, Ü. (2008). Cephalopod distribution in Iskenderun Bay (Eastern Mediterranean-Turkey). *J. Fish. Sci.*, 2, 118–125.
- 84 Moreno, A., Pereira, J., Arvanitidis, C., Robin, J.-P., Koutsoubas, D., Perales-Raya, C. *et al.* (2002). Biological variation of *Loligo vulgaris* (Cephalopoda: Loliginidae) in the eastern Atlantic and Mediterranean. *Bull. Mar. Sci.*, 71, 515–534.
- 85 Šifner, S.K. & Vrgoč, N. (2004). Population structure, maturation and

- reproduction of the European squid, *Loligo vulgaris*, in the Central Adriatic Sea. *Fish. Res.*, 69, 239–249.
- 86 Júnior, T.V., Muniz, J. & Lima, M.C. De. (2014). Occurrence and biological aspects of the Atlantic brief squid *Lolliguncula brevis* in the estuary of São Vicente-SP, southeastern Brazil. *UNISANTA Biosci.*, 3, 66–77.
- 87 Sánchez, P. (2003). Cephalopods from off the Pacific coast of Mexico: biological aspects of the most abundant species. *Sci. Mar.*, 67, 81–90.
- 88 Nabhitabhata, J. (1995). Mass culture of cephalopods in Thailand. *World Aquac.*, 26, 25–29.
- 89 Sivashanthini, K., Charles, G.A. & Thulasitha, W.S. (2009). Length-weight relationship and growth pattern of *Sepioteuthis lessoniana* Lesson 1830 (Cephalopoda: Teuthida) from the Jaffna Lagoon, Sri Lanka. *J. Biol. Sci.*, 9, 357–361.
- 90 Sivashanthini, K., Thulasitha, W.S. & Charles, G.A. (2010). Reproductive characteristics of squid *Sepioteuthis lessoniana* (Lesson, 1830) from the northern coast of Sri Lanka. *J. Fish. Aquat. Sci.*, 5, 12–22.
- 91 Siddique, M.A.M., Arshad, A. & Amin, S.M.N. (2014). Length-weight relationships of the tropical cephalopod *Uroteuthis chinensis* (Gray, 1849) from Sabah, Malaysia. *Zool. Ecol.*, 24, 215–218.
- 92 Yunrong, Y., Yuyuan, L., Shengyun, Y., Guirong, W., Yajin, T., Qibin, F. *et al.* (2013). Biological characteristics and spatial-temporal distribution of mitre squid, *Uroteuthis Chinensis*, in the Beibu Gulf, south China Sea. *J. Shellfish Res.*, 32, 835–844.
- 93 Karnik, N.S. & Chakraborty, S.K. (2001). Length-weight relationship and morphometric study on the squid *Loligo duvauceli* (d’Orbigny) (Mollusca / Cephalopoda) off Mumbai (Bombay) waters, west coast of India. *Indian J. Mar. Sci.*, 30, 261–263.
- 94 Mohamed, K.S. (1996). Estimates of growth, mortality and stock of the Indian squid *Loligo duvauceli* Orbigny, exploited off Mangalore, southwest coast of India. *Bull. Mar. Sci.*, 58, 393–403.
- 95 Rao, G.S. (1988). Biology of inshore squid *Loligo duvaucelli* Orbigny, with a note on its fishery off Mangalore. *Indian J. Fish.*, 35, 121–130.
- 96 Siddique, M.A.M., Khan, M.S.K., Habib, A., Bhuiyan, M.K.A. & Aftabuddin, S. (2016). Size frequency and length–weight relationships of three semi-

- tropical cephalopods, Indian squid *Photololigo duvaucelii*, needle cuttlefish *Sepia aculeata*, and spineless cuttlefish *Sepiella inermis* from the coastal waters of Bangladesh. *Zool. Ecol.*, 26, 176–180.
- 97 Wang, K.Y., Liao, C.H. & Lee, K.T. (2008). Population and maturation dynamics of the swordtip squid (*Photololigo edulis*) in the southern East China Sea. *Fish. Res.*, 90, 178–186.
- 98 Giordano, D., Busalacchi, B., Bottart, T., Perdichizzi, F., Profeta, A., Perdichizzi, A. *et al.* (2010). Population dynamics and distribution of *Eledone cirrhosa* (Lamarck, 1798) in the southern Tyrrhenian Sea (central Mediterranean). *Cah. Biol. Mar.*, 51, 213–227.
- 99 Rigueira, M., González, A.F., Guerra, A. & Soares, A. (2013). Reproductive traits of horned octopus *Eledone cirrhosa* in Atlantic Iberian waters. *J. Mar. Biol. Assoc. UK.*, 93, 1641–1652.
- 100 Akyol, M., Sen, H. & Kmacigil, H.T. (2007). Reproductive biology of *Eledone moschata* (Cephalopoda: Octopodidae) in the Aegean Sea (Izmir bay, Turkey). *J. Mar. Biol. Assoc. UK.*, 87, 967–970.
- 101 Ikica, Z., Šifner, K. & Joksimović, A. (2011). Some preliminary data on biological aspects of the musky octopus, *Eledone moschata* (Lamarck, 1798) (Cephalopoda: Octopodidae) in Montenegrin waters. *Stud. Mar.*, 25, 21–36.
- 102 Šifner, S.K. & Vrgoč, N. (2009). Reproductive cycle and sexual maturation of the musky octopus *Eledone moschata* (Cephalopoda: Octopodidae) in the northern and central Adriatic Sea. *Sci. Mar.*, 73, 439–447.
- 103 Silva, L., Ramos, F. & Sobrino, I. (2004). Reproductive biology of *Eledone moschata* (Cephalopoda: Octopodidae) in the Gulf of Cádiz (south-western Spain, ICES Division IXa). *J. Mar. Biol. Assoc. UK.*, 84, 1221–1226.
- 104 Guard, M. & Mgaya, Y.D. (2002). The artisanal fishery for *Octopus cyanea* Gray in Tanzania. *AMBIO A J. Hum. Environ.*, 31, 528–536.
- 105 Otero, J., González, Á.F., Sieiro, M.P. & Guerra, Á. (2007). Reproductive cycle and energy allocation of *Octopus vulgaris* in Galician waters, NE Atlantic. *Fish. Res.*, 85, 122–129.
- 106 Raberinary, D. & Benbow, S. (2012). The reproductive cycle of *Octopus cyanea* in southwest Madagascar and implications for fisheries management. *Fish. Res.*, 125–126, 190–197.
- 107 DeRusha, R.H., Forsythe, J.W. & Hanlon, R.T. (1987). Laboratory growth,

- reproduction and life span of the Pacific pygmy octopus, *Octopus digueti*. *Pacific Sci.*, 41, 104–121.
- 108 Avila-poveda, O.H., Colin-flores, R.F. & Rosas, C. (2009). Gonad development during the early life of *Octopus maya* (Mollusca: Cephalopoda). *Biol. Bull.*, 216, 94–102.
- 109 Cortez, T., González, A.F. & Guerra, A. (1999). Growth of *Octopus mimus* (Cephalopoda, Octopodidae) in wild populations. *Fish. Res.*, 42, 31–39.
- 110 Quetglas, A., González, M. & Franco, I. (2005). Biology of the upper-slope cephalopod *Octopus salutii* from the western Mediterranean Sea. *Mar. Biol.*, 146, 1131–1138.
- 111 Jabeur, C., Nouria, T., Khoufi, W., Mosbahi, D.S. & Ezzeddine-Najai, S. (2012). Age and growth of *Octopus vulgaris* Cuvier, 1797, along the east coast of Tunisia. *J. Shellfish Res.*, 31, 119–124.
- 112 Lourenço, S., Moreno, A., Narciso, L., González, Á.F. & Pereira, J. (2012). Seasonal trends of the reproductive cycle of *Octopus vulgaris* in two environmentally distinct coastal areas. *Fish. Res.*, 127–128, 116–124.
- 113 Oosthuizen, A. & Smale, M.J. (2003). Population biology of *Octopus vulgaris* on the temperate south-eastern coast of South Africa. *J. Mar. Biol. Assoc. UK.*, 83, 535–541.
- 114 Smale, M.J. & Buchan, P.R. (1981). Biology of *Octopus vulgaris* off the east coast of South Africa. *Mar. Biol.*, 65, 1–12.
- 115 Camarillo-Coop, S., Salinas-Zavala, C.A., Lavaniegos, B.E. & Markaida, U. (2013). Food in early life stages of *Dosidicus gigas* (Cephalopoda: Ommastrephidae) from the Gulf of California, Mexico. *J. Mar. Biol. Assoc. UK.*, 93, 1903–1910. [data supplied as pers. comm. by S. Camarillo-Coop]
- 116 Markaida, U., Quiñónez-Velázquez, C. & Sosa-Nishizaki, O. (2004). Age, growth and maturation of jumbo squid *Dosidicus gigas* (Cephalopoda: Ommastrephidae) from the Gulf of California, Mexico. *Fish. Res.*, 66, 31–47.
- 117 Zepeda-benitez, V.Y. & Morales-bojórquez, E. (2014). Age and growth modelling for early stages of the jumbo squid *Dosidicus gigas* using multi-model inference. *CalCOFI Rep.*, 55, 197–204.
- 118 Santos, R.A. & Haimovici, M. (1997). Reproductive biology of winter-spring spawners of *Illex argentinus* (Cephalopoda: Ommastrephidae) off southern Brazil. *Sci. Mar.*, 61, 53–64.

- 119 Arvanitidis, C., Koutsoubas, D., Robin, J.-P., Pereira, J., Moreno, A., da Cunha, M.M. *et al.* (2002). A comparison of the fishery biology of three *Illex coindetii* Venary, 1839 (Cephalopoda: Ommastraephidae) populations from the European Atlantic and Mediterranean waters. *Bull. Mar. Sci.*, 71, 129–146.
- 120 Belcari, P. (1996). Length-weight relationships in relation to sexual maturation of *Illex coindetii* (Cephalopoda: Ommastrephidae) in the northern Tyrrhenian Sea (Western Mediterranean). *Sci. Mar.*, 60, 379–384.
- 121 Ceriola, L., Ungaro, N. & Toteda, F. (2006). Some information on the biology of *Illex coindetii* Verany, 1839 (Cephalopoda, Ommastrephidae) in the south-western Adriatic Sea (Central Mediterranean). *Fish. Res.*, 82, 41–49.
- 122 González, A.F., Rasero, M. & Guerra, A. (1992). *Illex coindetii* and *Todaropsis eblanae* (Cephalopoda, Ommastrephidae): their present status in Galician fisheries. *Int. Counc. Explor. Sea.*, ICES C.M.1, 1–14.
- 123 González, A.F., Rasero, M. & Guerra, A. (1994). Preliminary study of *Illex coindetii* and *Todaropsis eblanae* (Cephalopoda: Ommastrephidae) in northern Spanish Atlantic waters. *Fish. Res.*, 21, 115–126.
- 124 González, A.F., Castro, B.G. & Guerra, A. (1996). Age and growth of the short-finned squid *Illex coindetii* in Galician waters (NW Spain) based on statolith analysis. *ICES J. Mar. Sci.*, 53, 802–810.
- 125 Petrić, M., Ferri, J., Škeljo, F. & Šifner, S.K. (2010). Body and beak measures of *Illex coindetii* (Cephalopoda: Ommastrephidae) and their relation to growth and maturity. *Cah. Biol. Mar.*, 51, 275–287.
- 126 Sánchez, P., González, Á.F., Jereb, P., Laptikhovskiy, V., Mangold, K.M., Nigmatullin, C.M. *et al.* (1998). *Illex coindetii*. In: *Squid Recruitment Dynamics. The Genus Illex as a Model. The Commercial Illex Species. Influences on Variability*, (eds. Rodhouse, P.G., Dawe, E.G., & O’Dor, R.K.). FAO, Rome, pp. 59–76.
- 127 Dawe, E.G. (1984). Variation in length-weight relationships, condition, and feeding spectrum of short-finned Squid (*Illex illecebrosus*) at Holyrood, Newfoundland. *Northwest Atl. Fish. Organ.*, NAFO SCR Doc. 84/IX/112.
- 128 Hendrickson, L.C. (2004). Population biology of northern shortfin squid (*Illex illecebrosus*) in the Northwest Atlantic Ocean and initial documentation of a spawning area. *ICES J. Mar. Sci.*, 61, 252–266.
- 129 Chembian, A.J. (2013). Studies on the biology, morphometrics and

- biochemical composition of the ommastrephid squid, *Sthenoteuthis oualaniensis* of the southwest coast of India. Ph. D. thesis, Cochin University of Science and Technology, India, 2013.
- 130 Suzuki, T., Yamamoto, S., Ishii, K. & Matsumoto, W.M. (1986). On the flying squid *Stenoteuthis oualaniensis* in Hawaiian waters. *Bull. Fac. Fish. Hokkaido Univ.*, 37, 111–123.
- 131 Arkhipkin, A. & Mikheev, A. (1992). Age and growth of the squid *Sthenoteuthis pteropus* (Oegopsida: Ommastrephidae) from the Central-East Atlantic. *J. Exp. Mar. Bio. Ecol.*, 163, 261–276.
- 132 Nigmatullin, C.M., Laptikhovsky, V. V & Moustahfid, H. (2002). Brief review on the ecology in the north African population of arrow squid *Todarodes sagittatus* (Cephalopoda: Ommastrephidae). *Bull. Mar. Sci.*, 71, 581–590.
- 133 Piatkowski, U., Hernandez-Garcia, V. & Clarke, M.R. (1998). On the biology of the European flying squid *Todarodes sagittatus* (Lamarck, 1798) (Cephalopoda, Ommastrephidae) in the central eastern Atlantic. *South African J. Mar. Sci. Tydskr. Vir Seewetenskap.*, 20, 375–383.
- 134 Quetglas, A., Alemany, F., Carbonell, A., Merella, P. & Sánchez, P. (1998). Some aspects of the biology of *Todarodes sagittatus* (Cephalopoda: Ommastrephidae) from the Balearic Sea (Western Mediterranean). *Sci. Mar.*, 62, 73–82.
- 135 Arkhipkin, A.I. & Laptikhovsky, V. V. (2000). Age and growth of the squid *Todaropsis eblanae* (Cephalopoda: Ommastrephidae) on the north-west African shelf. *J. Mar. Biol. Assoc. UK.*, 80, 747–748.
- 136 Guerra, Á., Belcari, P. & González, Á.F. (2013). *Todaropsis eblanae*, lesser flying squid. In: *Advances in Squid Biology, Ecology and Fisheries: Part II - Oegopsid Squids*, (eds. Rosa, R., O’Dor, R., & Pierce, G.). Nova Science Publishers Inc, New York, USA, pp. 149–168.
- 137 Hastie, L.C., Joy, J.B., Pierce, G.J. & Yau, C. (1994). Reproductive biology of *Todaropsis eblanae* (Cephalopoda: Ommastrephidae) in Scottish waters. *J. Mar. Biol. Assoc. UK.*, 74, 367–382.
- 138 Robin, J.-P., Denis, V., Royer, J. & Challier, L. (2002). Recruitment, growth and reproduction in *Todaropsis eblanae* (Baal, 1841), in the area fished by French Atlantic trawlers. *Bull. Mar. Sci.*, 71, 711–724.
- 139 Zumholz, K. & Piatkowski, U. (2005). Research cruise data on the biology of

- the lesser flying squid, *Todaropsis eblanae*, in the North Sea. *Aquat. Living Resour.*, 18, 373–376.
- 140 Rao, G.S. (1997). Aspects of biology and exploitation of *Sepia aculeata* Orbigny from Mangalore area, Karnataka. *Indian J. Fish.*, 44, 247–254.
- 141 Guerra, A. & Castro, B.G. (1989). Some aspects of the biology of *Sepia elegans* (Cephalopoda, Sepioidea) from the Ria de Vigo, NW Spain. *Vie Milieu.*, 39, 213–218.
- 142 Salman, A. (2015). Reproductive biology of the elegant cuttlefish (*Sepia elegans*) in the eastern Mediterranean. *Turkish J. Fish. Aquat. Sci.*, 15, 265–272.
- 143 Gabr, H.R., Hanlon, R.T., Hanafy, M.H. & El-Etreby, S.G. (1999). Reproductive versus somatic tissue allocation in the cuttlefish *Sepia dollfusi* Adam (1941). *Bull. Mar. Sci.*, 65, 159–173.
- 144 Sasikumar, G., Mohamed, K.S. & Bhat, U.S. (2013). Inter-cohort growth patterns of pharaoh cuttlefish *Sepia pharaonis* (Sepioidea: Sepiidae) in eastern Arabian Sea. *Rev. Biol. Trop.*, 61, 1–14.
- 145 Dunn, M.R. (1999). Aspects of the stock dynamics and exploitation of cuttlefish, *Sepia officinalis* (Linnaeus, 1758), in the English Channel. *Fish. Res.*, 40, 277–293.
- 146 Dunning, M., McKinnon, S., Lu, C.C., Yeatman, J. & Cameron, D. (1994). Demersal cephalopods of the Gulf of Carpentaria, Australia. *Mar. Freshw. Res.*, 45, 351–374.
- 147 Emam, W.M. (1994). Stock assessment of the cuttlefish *Sepia prashadi* (Mollusca, Cephalopoda) in the Gulf of Suez. *Indian J. Mar. Sci.*, 23, 35–38.
- 148 Zumholz, K. & Frandsen, R.P. (2006). New information on the life history of cephalopods off west Greenland. *Polar Biol.*, 29, 169–178.
- 149 Yau, C. & Boyle, P.R. (1996). Ecology of *Sepiolo atlantica* (Mollusca: Cephalopoda) in the shallow sublittoral zone. *J. Mar. Biol. Assoc. UK.*, 76, 733–748.