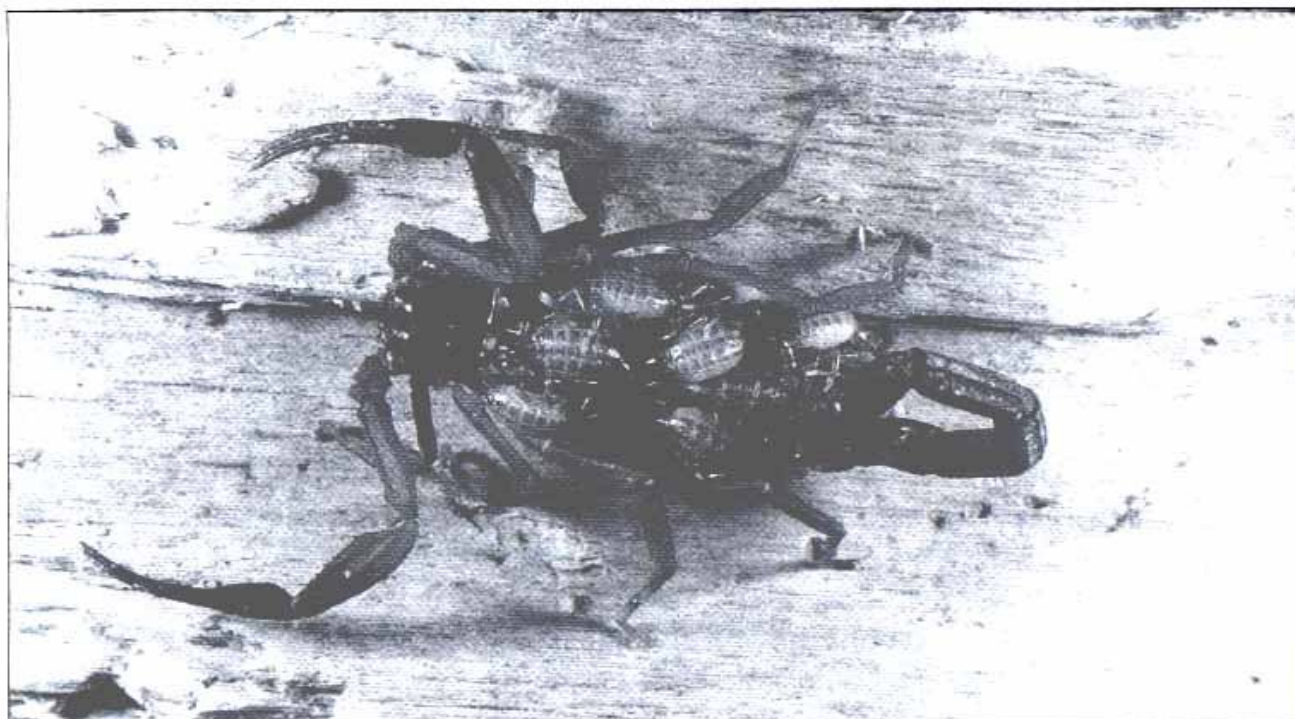


Rearing Of The Scorpion *Lychas scutillus*

František Kovařík

The genus *Lychas* comprises 37 species inhabiting southern, central and eastern Africa (*L. asper*, *L. burdoi*, *L. obsti*) and a vast region from India (*L. tricarinatus*, *L. scoplandi*) to Australia (*L. marmoreus*, *L. variatus*) (see references).

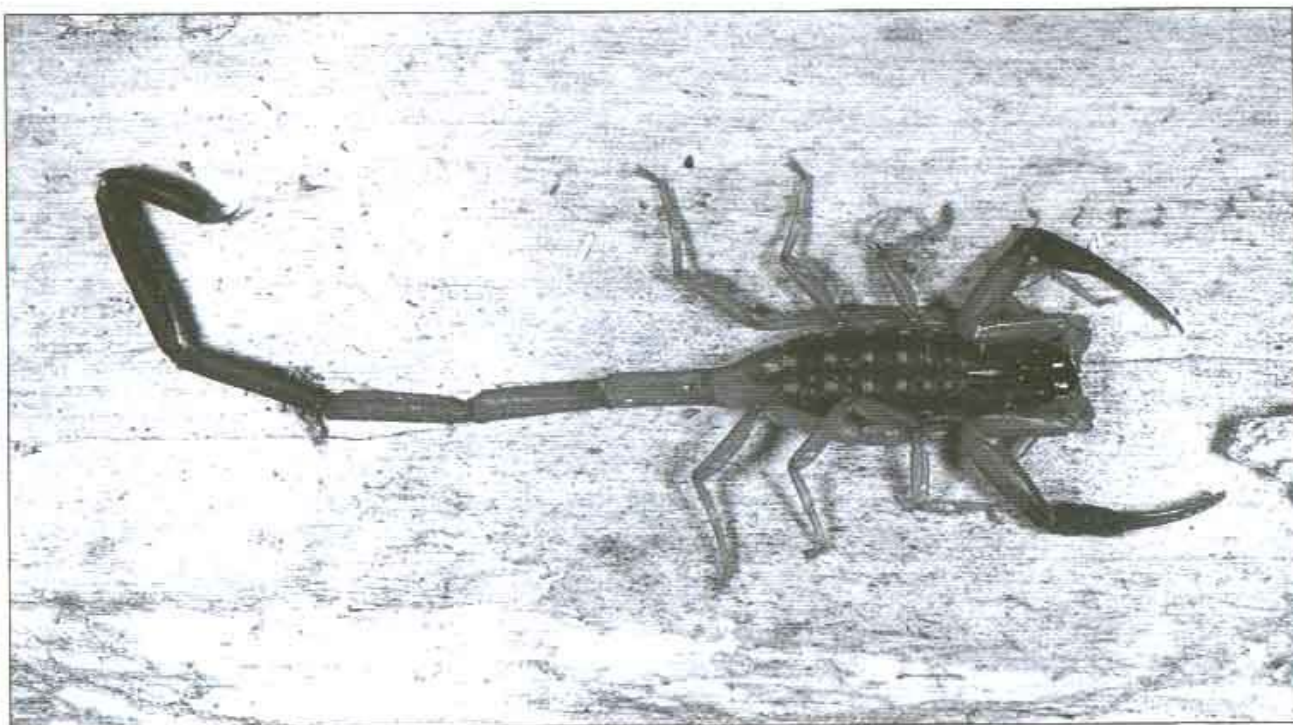


***Lychas scutillus* ♀ : Photo - František Kovařík**

Lychas scutillus is the type species of the genus and occurs in Myanmar, Thailand, Malaysia and Indonesia. The female is 45 – 56 mm long, whereas the male may reach as much as 90 mm. The species is not rare but also not as common as the two dominant Oriental scorpions, *Liocheles australasiae* (family Ischnuridae) and *Lychas mucronatus*. The two species of *Lychas* can be easily differentiated using sexual dimorphism. In *L. mucronatus* the metasoma (incorrectly called tail) is equally long in both sexes and the male has the grasping inner edges of the pincers warped so that the closed fixed and movable fingers do not meet everywhere along their length (as in *L. kralli* from Thailand). In *L. scutillus*, on the other hand, the male has a much longer metasoma than the female (as in *L. shelfordi*) and the male pincers have straight grasping edges that meet without gaps. Combinations of these characters are present also in several other species of the genus, e. g. *L. asper*, *L. nigristernis* and *L. obsti*.

The optimal rearing container is cast glass, because putty or even glue in the corners provides enough friction to climb and escape. Especially young scorpions and the small cricket nymphae on which they feed are capable of climbing seemingly smooth surfaces. The lid of the container must have an area of fine mesh wire or cloth for ventilation. The

bottom is filled with a layer of peat moss or a similar substrate used for planting seedlings. The substrate ought to be sufficiently thick in order to assure good moisture retention. A few pieces of bark are necessary to provide dark hiding places. It is also good to include a small plant and to regularly spray it, as scorpions prefer drops of water on leaves to a water dish.



Lychas scutillus ♂ : Photo - František Kovařík

In the wild scorpions prey on a variety of other invertebrates, but in captivity it is best to feed them primarily crickets of suitable size, from early-stage nymphs to imagoes.

After birth the larvae remain on their mother's back for about seven days, and so soon as they become independent they or the mother should be transferred into a separate container. I use containers approximately 9 x 12-18 x 10 (h) cm and keep them in a modified glass-front bookcase. Such an enclosure is not mandatory, but it further helps to prevent escape and makes temperature and humidity much easier to maintain. I do not recommend plastic containers frequently used for tarantulas, because their not quite vertical walls make climbing easier and the tight lid causes insufficient ventilation and consequently fast moulding of dead crickets as well as of substrate.

The larvae of *L. scutillus* undergo the first ecdysis on the back of their mother seven days after birth, attain real scorpion appearance, and within the next few days begin to leave. At first they stay underneath the mother or right next to her, dispersing when disturbed but returning back to her in a short while. This stage lasts less than a week, and as soon as the young begin to feed the mother is removed. The young are then split according to the timing of their next ecdysis, which depends primarily on the individual intensity of

feeding. Scorpions cannot feed immediately before and after ecdysis, and crickets may disturb, damage or even kills them during that time. However, between ecdyses the young feed virtually all the time and thus require a fresh supply of cricket nymphs every day.

Therefore, immediately after the second ecdysis the young are transferred to another container using soft tweezers to prevent damage. The brood is thus divided into two (or more) containers with different feeding regimes, and cleanliness and fresh substrate are assured after each ecdysis. This system also allows the kind of recording shown in the table.

I have reared only five young of *L. scutillus*, which underwent the second ecdysis 30 to 40 days after birth (a. b.). Unfortunately, three of them perished shortly afterwards. The remaining two young underwent the third ecdysis 68 and 74 days a. b., the fourth ecdysis 88 and 104 days a.b., and the fifth and last ecdysis 135 and 141 days a.b. They happened to be a pair, and since they remained together the female gave birth at the age of 261 days.

| | Number of larvae | Time of ecdyses counted in days from date of birth | | | | | | Number of ecdyses | Remarks |
|--------------------------------|------------------|--|--------|---------|---------|---------|---------|-------------------|--|
| | | first | second | third | fourth | fifth | sixth | | |
| Family Buthidae | | | | | | | | | |
| <i>Androctonus australis</i> | 30-60 | 5 | 66 | 140 | 293 | 331 | 404 | 6-8 | only one specimen reared |
| <i>Centruroides gracilis</i> | 16-38 | 9-12 | 33-40 | 56-65 | 81-113 | 133-183 | 210-300 | 5-7 | fecundity 6 weeks to 8 months |
| <i>C. limbaris</i> | 31-40 | 9 | 38-46 | 65-90 | 126-156 | 199-225 | cca 400 | 4-6 | fecundity 135 days |
| <i>C. margaritatus</i> | cca 40 | 12 | 46-60 | 92-135 | 176-252 | 196-400 | 550 | 5-7 | sixth ecdysis at above 30°C at the age of ca. 300 days |
| <i>Lychas mucronatus</i> | 28-36 | 4 | 35-60 | 58-94 | 84-127 | 113-168 | - | 5 | females gave birth at the age of 203 – 400 days |
| <i>L. scutillus</i> | 12-26 | 7 | 30-40 | 68-74 | 88-104 | 135-141 | - | 5-7 | female gave birth at the age of 261 days |
| <i>Rhopalurus junceus</i> | 18-40 | 12 | 20-30 | 36-75 | 75-131 | 109-200 | 220-271 | 5-7 | seventh ecdysis at the age of 483 days |
| <i>Tityus cambridgei</i> | 16-40 | 5 | 26-38 | 49-80 | 79-115 | 127-180 | - | 5 | |
| <i>Tityus tamayoi</i> | 14 | 6 | 20-35 | 45-75 | 99-190 | - | - | 4-5 | perished at maturity after 520 – 550 days |
| Family Chactidae | | | | | | | | | |
| <i>Broteochactas delicatus</i> | 5 | 7 | 39-52 | 102-114 | 164-172 | 184 | 313 | 6 | only one specimen brought to maturity |
| <i>B. orinocensis</i> | 9 | 8 | 30-40 | 60-70 | 107-125 | 227-377 | 532-740 | 6 | |
| <i>Brotheas gervaisii</i> | 8-26 | 7 | 35-45 | 80-120 | 180-230 | 240-300 | - | 5 | |
| Family Euscorpiidae | | | | | | | | | |
| <i>Euscorpius carpathicus</i> | 8-30 | 9 | 59 | 90-130 | 165 | 205 | - | 5-6 | only one specimen brought to maturity |
| <i>E. germanus</i> | 6-30 | 10 | 130 | 164 | 204 | 255 | 326 | 5-6 | only one specimen reared |
| Family Scorpionidae | | | | | | | | | |
| <i>Heterometrus indicus</i> | 8-20 | 12-15 | 85-130 | 230-320 | 360-450 | 440-650 | 580-930 | 6 | |
| <i>H. laoticus</i> | 8-28 | 12 | 60-90 | 184-220 | cca 320 | cca 400 | cca 650 | 6 | |
| <i>H. spinifer</i> | 8-25 | 14 | 75-96 | 161-212 | 294-365 | 405-490 | cca 650 | 5-6 | |
| <i>Pandinus imperator</i> | 8-20 | 15 | 95-125 | 140-170 | 230-290 | 390-425 | 480-540 | 6-7 | seventh ecdysis at the age of 700 days |

The basic information on the development of scorpion species which I have reared from birth is summarized in the table. Data on the number of larvae produced and the total number of ecdyses are further correlated with and modified according to published information, but the length of development is intentionally left based on only my own observations in order to enable me to compare development of different groups of

species in similar conditions. All species have been reared at 24 - 30°C with occasional night-time drops to 20°C.

References

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