Captive breeding of *Ceratogyrus meridionalis*

by Phil Messenger

I last bred *Ceratogyrus meridionalis* formally known as *Pterinochilus meridionalis, two* years ago from which only 6 spiderlings successfully developed, the female that produced the sac died shortly after. Now having not seen any *C. meridionalis* for sale for the last couple of years, quite surprising as it used to be as commonly available as say *P. murinus*, I received 2 adult females last summer so as you can imagine I was quite excited when one of the *C. meridionalis* I kept back from my previous breeding matured male in Nov 03. After speaking to Richard Gallon and Ray Gabriel we concluded that we should try and get as many females mated with this male as we could as we would have no idea if or when the next males would be available, it's also an opportunity to rebuild future breeding stocks of this species. To add to the confusion some of the "C. meridionalis" currently being sold are miss-identified, they are in fact P. chordatus which from the dorsal view can look very similar, if there is no pale band under the abdomen it is not C. meridionalis.

Having successfully bred *Ceratogyrus* species many times I would usually expect an egg sac between 4 and 8 weeks after mating, and spiderlings some 5 to 8 weeks later kept at a temp of 80 to 86F

As soon as my male had constructed his first sperm web the race was on to get him around available females including the two I keep here, as you will see from my notes below it was not all plain sailing to get from mating to spiderlings. I have listed female 2 first as this was the order of eggsac production.

***Ceratogyrus meridionalis* #2** was mated on the 16.11.03, following the mating the female was kept well fed on 3 or 4 medium crickets 2 or 3 times a week, as the weeks, then months passed I started to wonder if there would be an eggsac as my anticipated time from mating to eggsac production came and went. She finally produced a typical hammock style sac during the night on 16.03.04, suspended from the side of the tank to the half flower pot in the middle of the tank, this was in my experience is an unusually long time from mating to sac production for *Ceratogyrus sp*, however, upon inspection of the sac it was evident that the female had ceased wrapping the sac prematurely, the eggs could clearly be seen through the unusually thin sac webbing, after speaking with Richard Gallon for advice he suggested I should remove the sac immediately as it would surely be eaten and attempt artificial incubation, Thanks to Richard for the prompt reply to an email sent at 8am on a Sunday morning, So having removed the sac from the female that early after it was produced, it could be said i was lacking confidence as i have had very little success at raising eggs to spiderlings from this early stage in the past. Anyway the unopened sac was placed on a piece of kitchen towel at the dry end of small container with the other end just slightly moistened, the sac has been turned 2 or 3 times daily until 27.04.04 when i had to open it as mould was starting to develop on the thin layer of web covering the sac, I would not usually open a Ceratogyrus sac before 18 to 20 days, but I was somewhat surprised when it was opened, other than a few eggs with mould on we had eggs with legs. 01.05.04 I have had to separate the sac into 2 pots as the eggs with legs that are stuck to the web are being contaminated with the spreading mould, so all eggs with legs that are free of the sac have been moved to avoid further contamination. The next development was on 04.05.04 when all the eggs with legs (nymph1) have moulted into nymph 2, now fully mobile nymphs. The Nymphs were checked every couple of days, on 14.05.04 the nymphs were clearly looking darker, by the evening of 15th all but just a couple had now moulted in to spiderlings, a sigh of relief, spiderlings at last! With in 2 days of moulting into spiderlings I have had to separate them due to cannibalism. The mouldy part of the eggsac that was kept separate yielded no spiderlings; it was very quickly consumed by mould and mites.

This for me was an achievement in it's self as it's the 1st time I have artificially incubated an eggsac from day one.
On the 06.06.04 this female produced a second suspended eggsac; it is quite common for Ceratogyrus sp to produce two or occasionally three eggsacs from a single mating. This eggsac was removed on 01.07.04, as soon as I removed the sac it was evident that something was wrong, the bottom of the sac was black. Upon opening the sac, most of the eggs were just a big black congealed blob, on the brighter side there were 7 nymphs free of the destroyed eggs which were removed and kept in the same way as the previous eggsacs, They then moulted into spiderlings on 09.07.04.

***Ceratogyrus meridionalis* #1** was mated on 13.11.03, feeding and temp was kept the same as female #2, The 2nd week of December and female #1 was showing all the signs of preparing for eggsac production, a huge abdomen and excessive webbing, and then came the 1st disappointment, this female moulted on 12.12.03, still not the end of the world as the male was still available for a return visit. Female #1 was then mated again on 20.03.04; unfortunately this female killed the male. Having kept the female well fed for the following weeks. After a couple of days of increased activity a typical hammock style eggsac was produced during the night of 05.05.04, this one appears to be in much better shape than that of female #2, This female is kept in the plastic shoe box type container quite close to a heat mat that is stuck to the back wall of the cupboard where all my mated spiders and incubating eggs are kept, this eggsac was produced at the back of the box which would be the warmest end of the enclosure being so close to the heat mat, the ambient temperature in the cupboard is 86F but I would suspect it to be warmer that close to the heat source. Being concerned that this sac could be eaten by the female I removed the eggsac earlier than I usually would, it was removed on 17.05.04; 12 days after it was produced for artificial incubation using the same technique as with the sac of female #2, the sac has been gently opened to check the eggs are viable, which they are, eggs with legs. On 24.05.04, 17 days after the sac was produced the eggs with legs started to moult into fully mobile nymphs, with in 24 hours they had all moulted. 04.06.04 the nymphs started to moult, within 24 hours all the nymphs had moulted into spiderlings. There was no further eggsacs from this female, she moulted 05.07.04.

female	Mated	results
C. meridionalis #2	16.11.03	Eggsac 1 = 081 spiderlings Eggsac 2 = 07 spiderlings
C. meridionalis #1	20.03.04	Eggsac 1 = 157 spiderlings

To summarize, from my notes above the time from mating to eggsac production can vary, the times detailed for egg development with seems to be quite predictable as the egg development times are consistent with all my previous breedings of Ceratogyrus species.

Most spiderlings from this breeding have be divided freely between hobbyists I know with *C. meridionalis* females or a specific interest in African tarantulas to ensure future breeding efforts when the first males from this eggsac start to mature. If any readers of this have female *C. meridionalis* available for future breeding please contact either, Richard Gallon, Ray Gabriel or myself so we will have a list of available females when the 1st males from this breeding become available. I can be contacted through my web site:
http://homepage.ntlworld.com/the.tarantula.store

The above Photos are of *Ceratogyrus meridionalis*

The above photos are of *Pterinochilus chordatus*

Below is my photo diary of the sac from female #2 *Ceratogyrus meridionalis* that was removed and artificially incubated just a few hours after the sac was produced

In the above photo taken 10 days after the sac was removed from female #2 the eggs have now developed to call eggs with legs.

In this photo taken @ 17 days you can see the eggs with legs are starting to darken up, so should moult into nymphs any day now.

In the above pic taken 18 days the eggs with legs have now moulted into fully mobile nymphs.

In this photo taken @ 17 days you can see the eggs with legs are starting to darken up, so should moult into nymphs any day now.

The above pic was taken @ 29 days, All but just a couple of the nymphs have now moulted into spiderlings.

I would like to thank Richard Gallon and Ray Gabriel for their advice and efforts into this breeding project, I'd also like to thank Tracy messenger for the separating and posting out the spiderlings.