

haben, dessen vergleichend-anatomische Untersuchung wichtige Schlüsse auf die Stammesentwicklung der Bienen ermöglichen wird.

### Literaturverzeichnis.

- Alfonsus, A., Allgemeines Lehrbuch der Bienezucht. Wien, 1905.  
 v. Berlepsch, A., Die Biene und ihre Zucht mit beweglichen Waben. 3. Aufl. Mannheim, 1873.  
 v. Buttel-Reepen, H., Über den gegenwärtigen Stand der Kenntnisse von den geschlechtsbestimmenden Ursachen bei der Honigbiene (*Apis mellifica* L.), ein Beitrag zur Lehre von der geschlechtlichen Präformation. In: Verhandlg. deutsch. zool. Ges. Tübingen, 1904.  
 ——— Stimmen der Wissenschaft. In: Bienenwirtsch. Centrabl. Jahrg. 41. No. 5. 1905.  
 Cheshire, F. R., The Apparatus for differentiating the Sexes in Bees and Wasps. An Anatomical Investigation into the Structure of the Receptaculum Seminis and adjacent parts. In: Journ. R. Micr. Soc. Ser. II. Bd. 5. 1885.  
 ——— Bees and Bee-keeping, Scientific and Practical. Bd. 1. Scientific. London, 1886.<sup>15</sup>  
 Grobden, C., Über eine Bienenkönigin, welche unfähig war, Drohneneier abzulegen. In: Verhandl. zool.-bot. Ges. Wien Bd. 45. 1895.  
 Küchenmeister, F., Warum legt eine Bienenkönigin ein unbefruchtetes Ei in eine Drohnenzelle? Warum ein befruchtetes in die Arbeiterzelle und primäre Weiselzelle (Schwarmweiselzelle)? Bedarf es hierzu seitens der Königin einer besonderen Intelligenz, eines besonderen Wissens oder Instinktes? In: J. Moleschott, Untersuchungen zur Naturlehre des Menschen und der Tiere. Bd. III. 1857.  
 Leuckart, R., Zur Kenntnis des Generationswechsels und der Parthenogenesis bei den Insekten. Frankfurt, 1858.  
 ——— Kapitel II und IV in v. Berlepsch, die Biene und ihre Zucht. 3. Aufl. 1873.  
 Leydig, F., Zur Anatomie der Insekten II. In: Arch. f. Anat. Physiol. Jahrg. 1859.  
 ——— Der Eierstock und die Samentasche der Insekten. In: Nov. Act. k. Ak. Leop.-Carol. Bd. 25. 1867.  
 Marchal, P., Sur le réceptacle séminal de la Guêpe (*Vespa germanica*). In: Ann. Soc. entomol. de France. Bd. 63. 1894.  
 Petrunkewitsch, A., Die Richtungskörper und ihr Schicksal im befruchteten und unbefruchteten Bienei. In: Zool. Jahrb. Abt. f. Anat. Bd. 14. 1901.  
 v. Siebold, C. Th., Wahre Parthenogenesis bei Schmetterlingen und Bienen. Leipzig, 1856.  
 Swammerdam, J., Biblia naturae. Leyden, 1738.

### 3. On some Pseudoscorpions from South America in the collection of Prof. Dr. F. Silvestri.

By Edv. Ellingsen, Kragerö (Norway).

eingeg. 24. Juni 1905.

Genus: *Chelifer*.

Subgenus: *Atemnus*.

*Chelifer nidificator* Balzan.

var. *minor* Balzan.

Ecuador: Guayaquil 50 specimens, 9 ♂, 41 ♀ (Vic. Ortoneda, 5 April 1899).

Like the variety from Venezuela, on which Balzan constituted his var. *minor*, the animals from Ecuador are distinguished from more

<sup>15</sup> Diese Arbeit war mir nicht zugänglich. Ihr Inhalt ist mir nur aus dem Lehrbuch von Alfonsus (1905) bekannt geworden.

southern forms of this species, not so much by the size, as by the tibia being more roundish, what Balzan does not mention in his description, but what appears from his figure and measurements.

Subgenus: *Lamprochernes*.

*Chelifer communis* Balzan.

Argentina: Tala 1 specimen (Dr. Silvestri); Uruguay: Salto 1 specimen.

*Chelifer argentinus* Thorell.

Ecuador: Guayaquil 1 specimen (Vic. Ortoneda).

*Chelifer nitidus* Ellingsen.

Ecuador: Guayaquil 2 specimens (Vic. Ortoneda).

The fingers of this species may be reduced to be only  $\frac{1}{3}$  of the length of the hand.

Subgenus: *Trachychernes*.

*Chelifer brevifemoratus* Balzan.

Uruguay: Salto 1 specimen; Ecuador: Guayaquil 1 specimen (Vic. Ortoneda).

Subgenus: *Chelifer* s. s.

*Chelifer Germainii* Balzan.

Argentina: Tala 1 specimen (Dr. Silvestri).

*Chelifer longichelifer* Balzan.

Ecuador: Guayaquil 1 specimen ♂ (Vic. Ortoneda).

*Chelifer Canestrinii* Balzan.

Ecuador: Guayaquil 2 specimens (Vic. Ortoneda).

*Chelifer proximus* nov. spec.

Two eyes, one on each side, near the corners, on small specimens often less conspicuous.

Body oval, more or less broad.

Cephalothorax, sclerites and palps brown, legs and interstitial parts of abdomen palish.

Cephalothorax considerably longer than broad, in the posterior  $\frac{1}{3}$  nearly parallelsided, then gradually and roundly narrowing forwards, front margin rounded, the central part nearly straight; strongly granulated, opaque, two transverse grooves, the anterior one about in the middle, strong and generally straight, the posterior groove somewhat nearer to the hinder margin than to the anterior groove, considerably less conspicuous and either nearly straight or somewhat curved backwards in the middle; dispersed, short, slightly clavate hairs, often a row of these hairs along the front margin.

Abdomen: the upper side granulated, opaque, the last tergite entire, the two first tergites are generally entire, the rest divided longitudinally by a fine line, often rather difficult to be seen; along the hinder margins

of the tergites a row of long, distinctly clavate hairs, another row of more scanty hairs is often seen before the hinder one; the hairs are placed on small, white tubercles. The sternites are not granulated, somewhat striped transversally, glossy, the last sternite entire, the rest divided longitudinally, along the hinder margins a row of fine, pointed hairs.

Palps about as long as the body or a little longer, according to the condition of the animals. Coxa smooth and glossy, except the front part, which is somewhat granulose, the rest of the palps are opaque and strongly granulated, except the fingers and a small part of the under side of the hand next to the fingers. The hairs of coxa pointed, on the other articles the hairs are short and slightly clavate, gradually passing into more slender and dentate ones; the hairs of the fingers pointed with some longer ones intermixed. — Trochanter with a short stalk, only little longer than wide, the inner side strongly convex, behind and above strongly swelled. Femur with a short, but distinct stalk, a little shorter than cephalothorax, slender, the inner side nearly straight, sometimes even very slightly concave, behind a little widened from the base, the outer side slightly convex, rounded next to the extremity. Tibia with a distinct stalk, on the inner side a little widened from the stalk and then very slightly convex or nearly straight, the outer side very slightly convex, somewhat rounded towards the extremity; in all the tibia is rather clubshaped. Hand with a short stalk, from somewhat oblique base evenly and slightly convex on both sides, gradually passing into the fingers. These are considerably longer than the hand, distinctly curved.

Mandibles: galea of ♂ very short, pointed, with no teeth, that of ♀ much longer and more robust, straight, with some fine teeth in the extremity.

Legs (except coxa, trochanter and trochantin) minutely granulose, with slightly clavate and dentate hairs, the femora of the two posterior pairs of legs broad. Claws simple.

Length: 2,4 mm.

Measurements: cephalothorax: long. 0,80; lat. behind 0,69. Femur: long. 0,69; lat. 0,16. Tibia: long. 0,61; lat. 0,19. Hand: long. 0,48; lat. 0,27. Fingers: long. 0,60 mm.

Argentina: St. Catalina 36 specimens, 16 ♂, 20 ♀ (Dr. Silvestri).

The species is very much allied to *Ch. rufus* Balzan and *Ch. Cane-strinii* Balzan; these three species are however easily distinguished from each other in the following manner:

*Ch. rufus*: Coxa strongly granulated and opaque, as also the hand, tibia somewhat oblique, being on the inner side most convex near the base and on the outer side most so towards the extremity, femur 4–5 times as long as broad, hand considerably shorter than tibia, fingers a little longer than the hand, about 1:1,1; the hairs of abdomen very strong, but short.

*Ch. Canestrinii*: Coxa entirely smooth and glossy, as also great part of the hand below, tibia shorter and rather more regular, femur 3—4 times as long as broad, hand about as long as tibia, fingers a little shorter or even considerably shorter than hand, the hairs of abdomen slightly clavate.

*Ch. proximus*: Coxa smooth and glossy except the front part, tibia about alike that of *rufus*, but a little more regular, femur similar to that of *rufus*, hand distinctly shorter than tibia, fingers distinctly longer than hand, about 1:1,25; the hairs of abdomen rather long and slender, but slightly clavate.

Genus: *Ideobisium*.

Subgenus: *Ideoroneus*.

*Ideobisium chilense* nov. sp.

One small eye on each side, about 2 diameters from the front margin.

Palps, cephalothorax and sclerites pale reddish, the other parts greyish white.

Cephalothorax much longer than broad, nearly parallelsided, the anterior  $\frac{1}{4}$ , however, somewhat roundly narrowing forwards, front margin distinctly sloping from the middle towards the sides (about as in *Microcreagris gigas* Balzan, but not quite so much), in the middle no point; minutely striped-shagreened, glossy, with some few simple, obtuse hairs.

Abdomen: tergites and sternites shagreened and glossy; there is a tending to a fine longitudinal stripe on some of the tergites, at all events the colour of the tergites is discontinued in the middle, on account of which a light, rather broad, longitudinal colour band is seen; somewhat before the hinder margins of the somites there are or have been some few, rather long, pointed hairs.

Palps longer than the body, but abdomen is somewhat contracted, glossy; coxa and trochanter minutely granulated, femur more distinctly granulated, except on the outer side, this being shagreened, tibia granulated on the inner side, the rest shagreened, hand minutely shagreened on the inner side, the rest smooth, the fingers smooth. The hairs pointed, somewhat longer on the inner side than on the outer one. — Trochanter stalked, a little longer than broad, the inner side somewhat convex, at the extremity with a strongly swelled, semicircular ring (as in *Ideobisium pallidum* Balzan), the outer side strongly concave, in all calyciformed. Femur a little longer than cephalothorax, with a short, but robust stalk, in the central part strongly curved upwards and forwards, the inner side somewhat convex, towards the extremity a little concave, the outer side in the greater part slightly concave, towards the extremity a little convex. Tibia with a long stalk, a little shorter than femur, somewhat club-shaped (as in *Id. pallidum*), the outer side very slightly and regularly convex, the inner side somewhat more strongly so in the middle.

Hand with a short stalk, considerably shorter than tibia, nearly twice as broad, the outer side very little convex, the inner side very strongly so, next to swelled. Fingers considerably longer than hand, slender and strongly curved, the fixed finger with low, angular teeth, the moveable finger with some very low teeth in the distal part.

Mandibles very robust (much alike those of *Microcreagris gigas*), quite as broad as cephalothorax, strongly narrowing forwards, the moveable finger longer than the trunk, situated on the outer side, with a long, simple, curved galea, with no teeth.

Legs: the femora minutely shagreened. The two anterior pairs of legs are composed of coxa, trochanter, femur pars basalis, femur pars tibialis and two tarsal joints, the distal tarsal joint longer than the proximal one; the two posterior pairs of legs are composed of coxa, trochanter, very broad femur with rather indistinct trochantin division somewhat above the middle, tibia and two tarsal joints, the distal joint nearly twice as long as the proximal one. The hairs of the legs pointed. Claws simple.

Length 4 mm, but abdomen is much contracted, the width of abdomen 1,60 mm.

Measurements: cephalothorax: long. 1,35; lat. 0,96. Mandibles: long. 0,54. Femur: long. 1,44; lat. 0,32. Tibia: long. 1,36; lat. 0,40. Hand: long. 1,12; lat. 0,70. Fingers: long. 1,52 mm.

Chile: Santiago 1 specimen (Dr. Silvestri).

Very much allied to *Ideobisium (Ideoroncus) pallidum* Balzan, and it is not quite impossible, that Balzan's specimens may have been young ones of this species, but till this is decided, it is impossible to join them, the difference being too great. The most important differences are: *pallidum* is only 2 mm long, the palps are to be quite smooth, hand longer than tibia, fingers only a little longer than hand, cephalothorax smooth.

### Genus: *Chthonius*.

Subgenus: *Pseudochthonius*.

*Chthonius Simoni* Balzan.

Uruguay: Salto 1 specimen.

Subgenus: *Chthonius* s. s.

*Chthonius Silvestrii* nov. sp.

Two small eyes on each side, the anterior eye about one diameter from the front margin, the posterior one about the same distance from the first; the anterior eye is distinctly developed, the posterior one is less developed.

Colour: palish, abdomen with some few very large, white spots.

Cephalothorax as long as broad, only little narrowing backwards, nearly squarish, the sides very slightly convex, front margin slightly convex, the central part straight with some minute teeth; minutely shagreened and somewhat glossy with some few long, pointed hairs.

Abdomen: tergites and sternites minutely shagreened and somewhat glossy, with hairs like those of cephalothorax.

Palps glossy, minutely shagreened, with fine, pointed hairs, somewhat longer on the inner side than on the outer side. — Trochanter with no distinct stalk, calyciformed, the inner side strongly convex, the outer side concave. Femur much longer than cephalothorax, with a very short stalk, the inner side forming an irregularly undulating line, in all nearly straight, the outer side, too, nearly straight, a little rounded next to the extremity. Tibia much shorter than femur, calyciformed. Hand with no stalk, somewhat longer and broader than tibia, on both sides slightly convex, only slightly narrowing towards the extremity. Fingers twice as long as hand, seen from above quite straight, laterally viewed nearly straight, too, only somewhat curved towards each other in the distal one fourth and the extremity, on the inner margins with few, large, slender, straight and pointed teeth, with very broad interstices, several times as broad as the teeth's width; on the fixed finger the teeth are higher than on the moveable one.

Mandibles minutely shagreened, the moveable finger about as long as the trunk, strongly curved and only slightly thickened at the rounding; the fixed finger slightly curved and somewhat protracted (more than general in the genus *Chthonius*), thus considerably projecting in the front of the moveable finger, when the fingers are closed.

Legs with pointed hairs; the femora of the two posterior pairs of legs somewhat broad. Claws simple.

Length 1,5 mm, width 0,6 mm.

Measurements: cephalothorax: long. 0,45; lat. 0,45 in front; 0,40 behind. Mandibles: long. 0,34. Femur: long. 0,62; lat. 0,13. Tibia: long. 0,24; lat. 0,13. Hand: long. 0,29; lat. 0,19. Fingers: long. 0,59 mm.

Chile: Santiago 1 specimen (Dr. Silvestri).

The nearest relative among the South American *Chthonius* is *Chth. hirsutus* Balzan, but the new species is distinguished from this, particularly by the far projecting finger of the mandibles, further by the femur and tibia of the palps being proportionally longer, the fingers being twice as long as the hand, these being in *hirsutus* only  $1\frac{1}{2}$  times as long as the hand; the teeth of the inner margins of the fingers are to be in *hirsutus*, according to Balzan's figure, very broad, in the new species they are much more slender.

# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Zoologischer Anzeiger](#)

Jahr/Year: 1905

Band/Volume: [29](#)

Autor(en)/Author(s): Ellingsen Edv.

Artikel/Article: [On some Pseudoscorpions from South America in the collection of Prof. Dr. F. Silvestri. 323-328](#)