ganz bestimmter Art, bei welcher nicht bloß die Plasmen zweier Zellen verschmelzen, sondern auch die Kerne. Gerade die Verschmelzung der Kerne ist der physiologisch wichtigste Theil dieses Vorganges, während die Verschmelzung der Plasmen von mehr nebensächlicher Bedeutung ist, oder wenigstens in zweiter Linie steht. Darauf weist auch der Vorgang der Befruchtung hin, bei welchem die geringe Menge von Plasma des eindringenden Samenkörpers kaum von großem Belang ist, es überdies, wie bekannt, Fälle giebt, wo der Schwanz des Samenkörpers, somit der größere Theil des Plasmas desselben, außerhalb der Eizelle bleibt.

Bei der Vereinigung von Samenkörper und Samennährzelle findet aber eine Kernvereinigung nicht statt. Bei derselben handelt es sich bloß um eine vorübergehende innige Verbindung des Plasmas jener Zellen behufs günstigerer Ernährung der einen. Diese Verbindung würde als »Plasmaverbindung« oder »Plasmafusion« zu bezeichnen sein, obgleich es sich wahrscheinlich nicht einmal um eine solche Verschmelzung der Plasmen handeln dürfte. Es bietet sich vielmehr bei dem »Eintauchen« der sich entwickelnden Samenkörper in die Nährzelle bloß ein directer Oberflächencontact dar, durch welchen die Nahrungszufuhr von der Nährzelle in die Samenkörper erfolgt, ein ähnliches Verhältnis wie etwa bei intracellulären Parasiten (*Eimeria* etc.), worauf schon Gilson hingewiesen hat.

6. On a Small Collection of Javanese Reptiles containing a New Species of Snake.

By Dr. Einar Lönnberg, Upsala.

eingeg. 11. Februar 1899.

The following species of snakes have been sent home to Upsala from Buitenzorg, Java, by Dr. E. Nyman:

Typhlops braminus Daud. 3 specimens.
Python reticulatus Schneid.

This specimen was very much infested by ticks on the facial portion of its head.

Tropidonotus trianguligerus Boie. Of this species there are 3 specimens, the largest of which is halfgrown. This is not so dark as the others and the triangular markings, although conspicuous, are not as distinct as in the two others. These two are young and the smaller of them although measuring about 22 cm still carries a pretty large vesica umbilicalis, the larger is 31 cm. Both are of a similar colour very dark brown with a vertebral series of round black dots. The large

triangular black spots on the sides have a small light mark at their bases which are directed upward. The points are usually divided and extend as two (or one) black streaks at the posterior margin of the ventral shields half way across the belly, and some of the posterior ones meet to form crossbands. These two specimens are intermediate forms to the var. *annularis* which perhaps may represent a juvenile stage.

Tropidonotus vittatus Lin. 2 specimens.

Tropidonotus subminiatus Schleg. 4 specimens (3 of them young).

Pseudoxenodon intermedius n. sp. With this name I think I must, at least pro tempore, distinguish a form which is represented in this collection by one specimen and which can be described as follows:

A *Pseudoxenodon* with the following lepidosis: Rostral about twice as broad as deep; internasals a little shorter than the praefrontals; frontal once and one third as long as broad, about as long as its distance from the end of the snout, considerably shorter than the parietals, the length of which nearly equals the length of the frontal and the praefrontals taken together; loreal longer than deep; one prae- and three postoculars; temporals 2 + 3 (but on the left side one of the posterior temporals reaches the postoculars so it seems as if it was 3 + 2 temporals); eight upper labials, third, fourth and fifth entering the eye; five lower labials in contact with the anterior chinshields, which are shorter than the posterior ones. Scales in 19 rows, all keeled except the most inferior lateral row and the scales on the neck. Ventrals 146, anal divided. The number of subcaudals cannot be stated as the tail has been mutilated. The main colour is dark olive-brown above, inconspicuously dotted with black. Head and neck have a greenish tint. Behind the neck there is a region about 3 cm in length in which the scales are margined by minium red colour and their bases have partly the same colour. In the next portion of the body, about 15 cm in length, some of the scales are margined in the same way by yellowish colour. But the posterior part of the body and the tail are uniformly coloured. The upper labials are lighter than the upper part of the head, the four posterior ones even being partly yellowish. The three anterior seams between the upper labials are black and a black streak extends from the eye and between the fifth and sixth labials; a black spot is situated on the upper part of the suture between the sixth and seventh labials. The lower parts are uniformly yellowish white, but the olivaceous colour of the back extends on the lateral parts of the ventral shields and there is in the anterior part of the body a black spot laterally on each gastrosteg on the border between the dark colour of the flanks and the light colour of the belly (but there is no light streak in this region as in *Pseudo-*

xenodon inornatus). The length of the animal from the snout to the anal opening is 42 cm, of the tail not quite 3 cm remain.

As can be seen from the diagnosis above this form differs from the javanese *Pseudoxenodon inornatus* in having a larger number of ventral shields, differently shaped loreal and frontal, three upper labials entering the eye, only one praeocular and different colour etc. The chinese *P. dorsalis* has only 17 rows of scales and two upper labials entering the eye and is differently coloured. The himalayan *S. macrops* is most similar to our form with regard to the lepidosis of the head, but has a larger number of ventrals and is differently coloured and has only two upper labials entering the eye. When a sufficient number of specimens are known it might be possible that the differences between the known species of *Pseudoxenodon* may be abolished, but it seems as if this form "*intermedius*" as yet must be distinguished.

Simotes octolineatus (Schneid.) 2 specimens, in one of which the most ventral black stripe is nearly inconspicuous.

Dendrophis pictus (Gmelin) 2 specimens.
Coluber melanurus Schleg. 1 specimen.
Dryophis prasinus Boie 4 specimens.
Bungarus fasciatus (Schneid.) 1 specimen.
Bungarus candidus (Lin.) 3 specimens.
Amblycephalus carinatus Boie 1 specimen.

The collection of lizards contains the following species:

Gymnodactylus marmoratus (Kuhl) Fitz. 1 specimen. Eggs probably belonging to this species have diameters of 10 and 8 mm. The surface of the shell is comparatively deeply pitted, but not granulate.

Hemidactylus frenatus (Schleg.) Dum. & Bibr. 6 specimens.

Gecko verticillatus (Laur.) 1 specimen fully coloured and 8 cm in length taken out from the egg shell, fragments of which are strongly granulate.

Gecko stentor Cantor 1 specimen.

Ptychozoon homalocephalum Creveldt 3 specimens. One of the specimens which probably has had its tail broken and reproduced has but three annuli with corresponding dermal lobes at the base of the tail, the remaining outer part is not annulate and surrounded by an undivided dermal expansion. A fourth specimen 5 cm in length with adherent yolk sac taken out from the egg shell has the tail already distinctly annulate and all dermal appendages developed. The eggs which are about 15 mm in length show a granulate (but rather indistinctly) surface. The collector informs us on the label that the eggs are fixed to the lower parts of bamboos and one side of the egg

shell is flattened and shows like a cast the outer structure of the bamboo. This indicates that the shells of the eggs when first laid are soft and sticky. The transverse diameter from this flattened side to the opposite surface is 9 mm.

Draco volans Lin. 4 specimens.

Calotes cristatellus (Kuhl) 2 specimens.

Mabuia multifasciata (Kuhl) 4 specimens, the largest uniformly brown with a large light patch on the sides, the smaller ones striped on the back and ocellate on the sides.

Lygosoma maculatum (Blyth.) = *Lyg. sanctum* Dum. & Bibr. 2 specimens.

Lygosoma Temminchii Dum. & Bibr. 1 specimen.

7. Einige Worte über die Entwicklung der parasitischen Copepoden.

Von W. Schimkewitsch, St. Petersburg.

eingeg. 13. Februar 1899.

Im III. Band des Zoologischen Centralblattes (1896) sagt Herr Professor Bergh in seinem Referat über meine Arbeit: Studien über parasitische Copepoden (Zeitschr. f. wiss. Zool. LXI. Bd. 3. Hft. 1896) Folgendes:

»Verf. vergleicht die teloblastische Entwicklungsweise dem gewöhnlichen Entwicklungsmodus ohne Teloblasten und kommt zu dem Ergebnis, daß erstere von letzterem abzuleiten ist. In Bezug hierauf dürfte er wohl kaum Widerspruch finden, da wohl Niemand die Entwicklung durch Teloblasten als etwas Primitives anzusehen geneigt sein dürfte.«

Diese Bemerkung ist auf ein Mißverständnis zurückzuführen. Auf p. 353 und 354 meines Aufsatzes ist davon die Rede, daß die frühe Differenzierung der Genitalanlage in Gestalt weniger Zellen eine der teloblastischen Entwicklungsweise anderer Organe ähnliche, und daher secundäre Erscheinung ist. Diese Ansicht mag nun wirklich auch schon von anderen Autoren ausgesprochen worden sein; jedenfalls aber giebt es Forscher, welche der diametral entgegengesetzten Auffassung huldigen. Ed. Meyer schließt sich in seiner, einstweilen nur in russischer Sprache publicierten Arbeit (Untersuchung zur Entwicklungsgeschichte der Anneliden, Arb. d. naturf. Ges. a. d. Univ. Kasan, Bd. XXXI. 1898), völlig der angeführten Ansicht an. Meine Beobachtungen über die Differenzierung der Genitalzellen bedürfen jedoch einer Richtigstellung. Pedaschenko (Die Embryonalentwicklung und Metamorphose von *Lernaea branchialis*, Arb. d. St. Petersb. naturf. Ges. Bd. XXI. 1898) fand, daß sich bei *Lernaea*