

Bach, welcher in den Fluß Rabiai mündet,	15 Exemplare	59—119 mm.
Bach Wai Semie,	10 -	90—18 -
Bach Wai Meniel,	226 -	89—12 -
Fluß Bajon,	1 -	96 -

Ich habe mir erlaubt diese Art nach meiner Frau zu benennen, die mich auf meiner Sammelreise begleitete und mir alle Hilfe bot. Auf dieser Reise besuchten wir auch die bezüglich ihrer Süßwasserfauna noch ganz unerforschte Insel Ceram. Von Melanotaeniinae fanden wir dort keine Spur, so daß wir annehmen dürfen, daß die Melanotaeniinae im Indischen Archipel in Waigöu ihre westliche Grenze erreichen.

3. On the modifications of the Circuli in the scales of Asiatic Cyprinid fishes.

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(With 5 figures.)

eingeg. 4. August 1910.

The sculpture of a Cyprinid scale consists principally of two distinct elements, the radii and the circuli. The radii are the strong lines radiating from the central region toward the margin, while the circuli are the fine concentric lines crossing the radii. At first sight, it might seem

Fig. 1.



Fig. 2.



Fig. 3.



Fig. 1. *Opsariichthys morrisonii* (*O. platypus*). Ningpo, China (Styan). A fish with bars like *Barilius*. The two larger lines are apical radii; they are crossed by numerous irregular lines, which are the lines of growth, comparable with those on a molluscan shell. The circuli are the numerous fine vertical lines, which fail in the apical field, but are seen to have no connection with lines of growth or radii.

Fig. 2 and 3. *Barbiichthys lacris*. W. Siam (C. Böck). Fig. 2 shows, greatly magnified, the breaking up of the circuli in the apical field to form pustulose markings, which are highly characteristic of certain Asiatic genera. Fig. 3 shows the same thing less magnified, with the nuclear ends of the apical radii.

that the circuli were simply lines of growth, like those on a snail's shell, but closer study shows that this is not the case, and in fact they appear to be fibrillae which were primitively longitudinal, as may still be seen in that ancient type *Amia calva* (cf. Smithsonian Misc. Coll., Vol. 56 no. 3, p. 2 fig. 3).

In the scales of the Asiatic Cyprinidae we have found various modifications of the circuli, leading to structures which would not at first be associated with them at all. It has therefore seemed worth while to present the accompanying figures, which bring out the facts in question, and also demonstrate the independence of the circuli from the lines of growth. It may be added that studies of numerous genera have shown that while the scale-markings are often very variable they are on the whole of great value as aids to classification, and also as throwing new light on the affinities of genera and families.

Fig. 4.



Fig. 5.

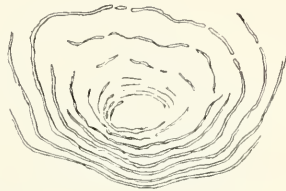


Fig. 4. *Osteochilus kahajancensis*. Baram district (C. Hose). Showing features similar to these in fig. 3. The heavy lines are apical radii.

Fig. 5. *Xenocypris argentea*. Mountain streams near Kiu-Kiang (Styan). The basal field is much smaller than the apical, with much more crowded circuli. The figure shows the nuclear area, with the basal circuli spreading and partly failing as they curve round to the apical field. All the figures are based on material from the British Museum. The scales were taken from the side of the fish, near the lateral line.

4. *Sphaerospora caudata* n. sp.

Pel Dr. B. Parisi, Milano, Museo di Storia Natur.

(Con 3 figure.)

ingeg. 5. August 1910.

Trovai questa specie nel rene degli agoni (*Alosa finta* Cuv. var. *lacustris*) del Lago di Como, spesso in quantità tale da dar origine a dei veri processi di degenerazione.

Le forme vegetative (Fig. 1) sono rotondeggianti od allungate, di dimensioni molto varie. Da quelle piccole racchiudenti due spore e del diametro di 25μ , si arriva fino a forme di 100μ che contengono un paio di dozzine di spore. I movimenti sono molto lenti e si effettuano mediante dei lobopodi emessi dell'ectoplasma trasparente ed omogeneo. L'endoplasma è granuloso, ricco di globuli gialli e di granuli di grasso. Da preparati colorati risulta che i pansporoblasti contengono numerosi nuclei, sporoblasti e spore in vari stadi di sviluppo.

Le spore mature sono subsferiche: viste dal di sopra (Fig. 3) si puentano rotondeggianti, di fianco (Fig. 2) leggermente ovoidali col

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