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# ON SCIADEICHTHYS (SELENASPIS) WALRECHTI, A NEW SOUTH AMERICAN CATFISH

by

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Two large specimens of a hitherto unknown species of neotropical catfish have recently been found dead and washed ashore beneath the dike along the Westerscheldt near Biezelinge, Zeeland, at a mutual distance of approximately 300 meters. Both were in excellent condition and have been presented to the Rijksmuseum van Natuurlijke Historie at Leiden by Mr. B. J. J. R. Walrecht.

A superficial examination already disclosed the fact that the two specimens belong to the (sub)genus Selenaspis, a well known group of catfishes inhabiting the salt and brackish shores and estuaries of the northern part of the South American continent. Some of the species are known to spawn in fresh water. The present specimens must have been transported by ship. Whether they have been thrown overboard dead or alive remains uncertain though the first possibility seems more plausible. The damaged and fringed condition of the fins indicates a period of drifting along the shore, while the length of this period is limited by the still rather fresh condition, especially of the larger and first collected specimen. On the other hand, putrefaction seems to be slow in this group of fishes.

On his request, Mr. Walrecht received the information that no recent shipment of South American aquarium fishes had arrived at the aquarium of the Antwerp Zoological Garden.

An investigation of the stomachs of the two specimens gave the following results. In the larger specimen, no remains of food were found; in the second specimen, the stomach contained a considerable quantity of remains, viz., a part of a rib, possibly from a pig, measuring 1.8 by 5 cm; several pieces of cartilage; numerous split peas; several small remains of plants

including (probably) the fruits of *Capparis spinosa*; some undefined remains; and an operculum of a mollusk identified by Dr. C. O. van Regteren Altena as very probably belonging to the neotropical fresh water species *Pomacea glauca* (L.) (Gastropoda, Prosobranchia, Pilidae). Excepting the mollusk, this does not seem to represent the natural food.

A third specimen, completely agreeing with the two from Zeeland, was found in our collection of stuffed fishes. It forms part of the extensive material collected by the pharmacist H. H. Dieperink in the neighbourhood of Paramaribo, Surinam, during the second quarter of the previous century.

This specimen bears the identification "Arius emphysetus (Müller & Troschel)", but a close comparison with the extensive literature on that species (Eigenmann, 1912, p. 135, pl. 9 fig. 1, with enumeration of further literature; Puyo, 1949, p. 59 ("Arius physacanthus")), reveals several important differences, e.g., the lack of a membrane between the posterior nostrils, the swollen basal part of the dorsal spine, the much longer maxillary barbals, and the dentification.

Although almost all Nematognathi collected by Dieperink seem to have been described by Bleeker (1862, pp. 371-389; 1863, pp. 10-18; 1864, pp. 1-104), the present specimen apparently was overlooked. Moreover, it does not agree with any of his descriptions.

As all three specimens easily can be discriminated from all known related species on account of the existence of a distinct transverse membrane between the posterior nostrils, the shape of the occipital process and of the dorsal shield, and the short maxillary barbels, they are described as new to science. In honour of Mr. Walrecht, the specific name *walrechti* is proposed.

The only reason for the discrimination of a separate genus Selenaspis seems to have been the existence of the internarial membrane, a character also known to occur in the young of Sciadeichthys proöps (Cuvier & Valenciennes) (Eigenmann, 1912, p. 139). I consequently prefer to reduce the name Selenaspis to subgeneric level.

#### Sciadeichthys (Selenaspis) walrechti nov. spec. (Plate III)

1 ex., Surinam, probably neighbourhood of Paramaribo, H. H. Dieperink, standard length 44.5 cm, holotype (Coll. No. 2141).

2 ex., Biezelinge, Zeeland, Netherlands, 7 & 10 VI 1954, B. J. J. R. Walrecht, standard length 46 & 41.5 cm, paratypes (Coll. Nos. 19808 & 19809).

D. J. 7; A. 17; P. I. 11-12; V. 1.5; lat. line about 100.

Moderately slender and elongate, depth of body 5.2, 4.6, 5.0, width of body 4.5, 4.3, 4.2 in standard length. Head depressed, upper outline hardly convex, sloping, with a blunt keel along occipital process and broadly

rounded along median line of dorsal plate. Length of head 3.65, 3.46, 3.4, width of head 1.3, 1.27, 1.3 in standard length.

Top of head, dorsal plate, humeral process, and part of opercles bony, not covered by skin, irregularly covered with granules. Dorsal plate shield-or heart-shaped, the anterior angle fitting into the concave apex of the occipital process. Eye 10-10.5 in head, 2.5-2.6 in snout, 4 in interorbital width. Snout 4 in head, interorbital width 2.4-2.5 in head. Fontanel reaching backwards to about  $2|_{3}$ -1 eye diameter behind eye. Width of mouth about 2 in head, lower jaw included.

Teeth numerous, villiform, in a continuous broad band on the upper jaw, with a median interruption on the lower jaw. Teeth on roof of mouth in five contiguous patches: a broad transverse median patch, slightly narrower at the median line; lateral of these there are two about square large patches; behind the square patches on each side a large triangular patch directed backwards.

Gill-membranes meeting ventrally at a rather blunt angle, forming a broad fold across the isthmus. Maxillary barbels reaching to about middle of pectoral spine, in largest specimen only to base of pectoral spine. Postmental barbels reaching straight backwards to slightly beyond gill opening, their length being about one eye diameter less than postocular length of head. Mental barbels reaching backwards to gill opening or slightly shorter.

Distance from dorsal spine to tip of snout about 2.5-2.7 in standard length. Dorsal spine about equal to postorbital length, granulate in front, the sides striate, the apical half with antrorse serrae along posterior margin. Pectoral spine of about the same length, with a rather fine serration along anterior margin, sides striate, posterior margin with strong antrorse serrae. Adipose rather large, posterior margin free. Caudal fin deeply forked, the upper lobe longest. Anal fin emarginate. Ventrals about as long as dorsal spines.

Colour bluish grey above, sides silvery, white below; proximal parts of maxillary barbels darker; fins partly dusky, especially ventrals and proximal part of pectorals.

The present species shows a close relationship with the well known Sciadeichthys (Selenaspis) herzbergi (Bloch), represented in the collection of the Leiden Museum by several fine specimens from Surinam, and with Sciadeichthys (Selenaspis) dowi (Gill) (Regan, 1906-1908, p. 120 (Galeichthys dovii); Steindachner, 1876, p. 569, pl. 6 (Arius alatus)), a Pacific species from tropical America not represented in our collection. The present species differs from the above named especially by the shield-shaped dorsal plate, which with a median anterior angle fits into the concave apex of the

occipital process. This character closely agrees with corresponding features in *Sciadeichthys emphysetus* (Müller & Troschel) (Eigenmann, 1912, pl. 9 fig. 1), a species without an internarial membrane.

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### EXPLANATION OF THE PLATE

Sciadeichthys (Selenaspis) walrechti nov. spec. Upper figure, habitus of the larger specimen collected near Biezelinge, Netherlands, June 7, 1954. Middle figure, type, from Surinam, in dorsal view. Lower figure, same specimen as upper figure, in dorsal view. Upper figure, × 0.23; middle figure, × 0.42; lower figure, × 0.46.

