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*Raja rakusai* sp. n. (*Pisces*,  
*Rajidae*) from the area of  
Elephant Island (South Shet-  
land Islands)

ABSTRACT: The new species of antarctic skates was described from waters near Elephant Island, as a *Raja rakusai* sp. n.

Key words: Antarctic, skate, new species

In January, 1979, near Elephant Island, South Shetland Islands six specimens of *Raja* (Linnaeus) were caught which do not belong to any known species of this genus. These specimens were caught together with *Breviraja griseocauda* (Norman) (Norman 1937) at lat. S 61°11'–61°20' and lon. W 56°04'–56°32' at a depth of 180 to 500 metres. They were recognized in this paper as a new species and named *rakusai* in honour of the head of our Antarctic program Dr. Stanisław Rakusa-Suszczewski.

These specimens were collected by K. Zieliński. All specimens are deposited in the Museum of Evolution, Polish Academy of Sciences (MEPAN).

Upper surface of disc brown with violet tint with numerous whitish spots more or less regularly distributed. There are a pair of much bigger spots at the base of pectoral fins in about middle of its length.

In a male specimen the spots were of oval shape accompanied in the middle by round smaller one. The lower surface is smooth and white-cream colour. The margin of tail is whitish. Disc from the back is covered with small spinules but not compactly as in *griseocauda*; these are nearly invisible on the tail. Two dorsal fin close to the end of tail, their bases nearly contiguous with any spines between them. Single praeocular spine, single postocular spine (with one exception — paratype No MEPAN-001-f has a second, much smaller spine at the angle of spiracle), single scapular spine. There are no similar spines in the middle of the body, these are on the tail only numbering 8 to 12 (Fig. 1, Table I and II).

This species appears to be most closely related to *Raja georgiana* Norman (Norman 1938) which has a broad distribution off the South Georgia coast and in the West Antarctic (Permitin 1969) but differs from



Fig. 1. *Raja rakusii* sp.n. (*Pisces*, *Rajidae*)

Table I.

Description of holotype, No MEPAN-001-a	
sex	female
total length in mm	295
disc width*)	71.19
vent-tail length*)	49.49
vent-snout length *)	49.49
tail length*)	49.41
snout (in % of disc width)	21.43
eye diameter**)	32.22
eye+ spiracle length**)	35.56
interorbital width**)	34.44
internasal width**)	44.00
spiracle length**)	22.22
number of tail spines	10

\*) — in % of total length

\*\*) — in % of snout length

Table II.

No	Description of paratypes				
	MEPAN 001-b	MEPAN 001-c	MEPAN 001-d	MEPAN 001-e	MEPAN 001-f
sex	female	female	male	female	female
total length in mm	232	303	304	310	325
disc widtht *)	69.82	74.59	68.09	77.42	75.38
vent-tail length*)	52.16	45.87	49.34	44.84	46.15
vent-snout length*)	46.55	51.82	49.34	52.58	52.31
tail length*)	48.28	41.42	46.38	39.84	44.00
snout in % of disc width	17.90	18.14	19.81	21.25	20.41
eye diameter**)	37.93	25.56	23.90	23.53	25.60
eye+ spiracle length**)	43.10	31.11	36.59	33.33	33.40
interorbital width**)	43.10	42.22	43.90	37.25	44.00
internasal width**)	61.38	60.00	68.28	46.08	54.00
spiracle length**)	21.38	24.44	21.95	21.57	22.40
number of tail spines	9	9	10	12	8

\*) — in % of total length

\*\*) — in % of snout length

it in the lack of a second postocular spine, the lack of second scapular spine and the lack of any large median spines in the middle of the body. There are also some differences in the morphometrical characters but these characters are very variable as for example vent-tail distance, eye diameter, internasal width and comparison is difficult.

In the same place two egg-capsules were also found, a very large one, 122 and 110 mm long (both without horns) and 63 and 71 mm width respectively. It is not possible to say whether these belong to the *Raja rakusai* species (at present). According to me, each of these egg-capsules belong to two different species.

I would like to thanks Roger Waite, University of Canterbury, New Zealand for reading the manuscript.

## Additional note

After the paper was in press author has got 27 further specimens of the same species in which mature specimens there are. The biggest measured 880 cm long and weighted 9 300 gramm. All this specimens will be described in the next paper.

## Summary

On the basis of six representatives of the genus *Raja* (Linnee) caught in January 1979 in the area of Elephant Island (South Shetlands), a new species of antarctic skate has been described and named *Raja rakusai*.

## Резюме

На основании шести особей из рода *Raja* (Linnee), пойманных в январе 1979 года в районе острова Элефант (Южные Шетланды), описан новый для науки вид антарктического ската, которую автор статьи назвал *Raja rakusai*.

## Streszczenie

Na podstawie osobników z rodzaju *Raja* (Linnee) złowionych w styczniu 1979 roku w rejonie Wyspy Słoniowej (Południowe Szetlandy) opisano nowy dla nauki gatunek płaszczki antarktycznej, który nazwano *Raja rakusai*.

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