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## ***Rajella paucispinosa* n. sp., a new deep-water skate (Elasmobranchii, Rajidae) from the western Indian Ocean off South Mozambique, and a revised generic diagnosis**

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### **Abstract**

A new species of the widely in temperate and tropical latitudes distributed skate genus *Rajella* is described based on an almost adult male specimen from the western Indian Ocean off South Mozambique. The holotype of *R. paucispinosa* n. sp. was caught during cruise 17 of RV ‘Vityaz’ along the deep western Indian Ocean in 1988/89. It is the northernmost record of a *Rajella* specimen in the western Indian Ocean. The new species is the 18th valid species of the genus and the fifth species in the western Indian Ocean. It differs from its congeners in the small maximal total length of about 50 cm and only few thorns on the dorsal surface. The new species has only two thorns on each orbit, one nuchal thorn, one right scapular thorn (left one not detectable, abraded), and one median row of tail thorns. Other species of *Rajella* typically have half rings of thorns on orbital rims, a triangle of thorns on nape-shoulder region, and at least three rows of tail thorns. Another conspicuous feature of the new species is the almost completely white dorsal and ventral coloration.

**Key words:** *Rajella paucispinosa* sp. n., new skate species, deep water, Mozambique, key to species of *Rajella*, morphology of scapulocoracoids, revised generic diagnosis

### **Introduction**

The genus *Rajella*, originally erected as a subgenus of *Raja* by Stehmann (1970), was elevated to generic status by McEachran & Dunn (1998). Its members are small-sized, short-snouted skates with a roundish disc, a tail that is distinctly longer than the body, a half ring of thorns on orbital rims, a triangle of thorns on the nuchal and scapular region, three rows of tail thorns, and large nasal capsules (Stehmann 1976). Species of *Rajella* are found worldwide in temperate and tropical latitudes. However, the Atlantic Ocean appears to be the center of distribution of *Rajella* as 13 of the 17 valid species occur therein (authors' compilation). Furthermore, of these 13 species only *R. barnardi* (Norman, 1935), *R. caudaspinosa* (von Bonde & Swart, 1923), *R. dissimilis* (Hulley, 1970), *R. leoparda* (von Bonde & Swart, 1923), and *R. sadowskii* (Krefft & Stehmann, 1974) have also been found outside of the Atlantic Ocean (Pequeño 1997, Compagno & Ebert 2007).

The new species described below, *Rajella paucispinosa*, is the fifth known species of the genus from the western Indian Ocean. However, most reported specimens of the other four species, *R. barnardi*, *R. caudaspinosa*, *R. dissimilis*, and *R. leoparda*, were caught in the southeastern Atlantic Ocean (Hulley 1970, Compagno & Ebert 2007). The specific name of *R. leopardus* is amended to *R. leoparda* in accordance with Article 34.2. of the International Code of Zoological Nomenclature (ICZN) to agree in gender with the feminine generic name. A further species, *R. ravidula* (Hulley, 1970), is distributed in the southeastern Atlantic Ocean, but has not yet been reported from the southwestern Indian Ocean. *Rajella ravidula* obviously occurs mainly along the West coast of South Africa with scattered records from along the western African coast and the waters off Cape Town as southeastern limit of distribution (Stehmann 1995, Compagno & Ebert 2007).

The new species of *Rajella*—formally described herein—was sampled from off southern Mozambique aboard

ZMH 121807 (ex ISH 200-1983), ZMH 122268 (ex ISH 75-1986, 20 specimens), ZMH 122764 (ex ISH 646-1986, three specimens), ZMH 122797 (ex ISH 644-1986, five specimens), ZMH 122805 (ex ISH 421-1986, three specimens), ZMH 122806 (ex ISH 640-1986), ZMH 123167 (ex ISH 106-1987), ZMH 123431 (ex ISH 174-1984 a+b, two specimens).

*Rajella kukujevi* (9 lots, 11 specimens). ZMH 112247 (ex ISH 31-1974), ZMH 112323 (ex ISH 91-1974, three specimens), ZMH 119567 (ex ISH 3313-1979), ZMH 122857 (ex ISH 638-1986), ZMH 123516 (ex ISH 167-1992), ZMH 123538 (ex ISH 153-1992), ZMH 123539 (ex ISH 159-1992), ZMH 123544 (ex ISH 171-1992), ZMH 123552 (ex ISH 142-1992).

*Rajella leoparda* (8 lots, 17 specimens). ZMH 105099 (ex ISH 29-1967), ZMH 105101 (ex ISH 36-1967), ZMH 105106 (ex ISH 26-1967), ZMH 105110 (ex ISH 20-1967, two specimens), ZMH 120101 (ex ISH 30-1982), ZMH 120105 (ex ISH 33-1982 a-c, three specimens), ZMH 120241 (ex ISH 35-1982 a-g, seven specimens), ZMH 121788 (ex ISH 2-1990).

*Rajella lintea* (14 lots, 16 specimens). ZMH 25726, ZMH 25727, ZMH 25728, ZMH 100474 (ex ISH 9-1957, three specimens), ZMH 100479 (ex ISH 7-1957), ZMH 100577 (ex ISH 56-1958), ZMH 101203 (ex ISH 26-1969), ZMH 101209 (ex ISH 27-1961), ZMH 113180 (ex ISH 722-1974), ZMH 120117 (ex ISH 135-1980), ZMH 121602 (ex ISH 1217-1982), ZMH 121975 (ex ISH 175-1984), ZMH 123156 (ex ISH 115-1987), ZMH 123157 (ex ISH 54-1987).

*Rajella ravidula* (3 lots, 4 specimens). ZMH 25260 (ex ISH 47-1967 a+b) (two paratypes), ZMH 25261 (ex ISH 50-1967) (holotype), ZMH 105105 (ex ISH 265-1967).

*Rajella sadowskii* (4 lots, 8 specimens). ZMH 25262 (ex ISH 1807-1968) (holotype), ZMH 25263 (ex ISH 1936-1968) (paratype), ZMH 25264 (ex ISH 1973-1968 a-e) (five paratypes), ZMH 25265 (ex ISH 2004-1968) (paratype).

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