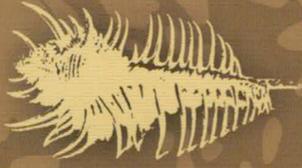


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# CONCHYLIA

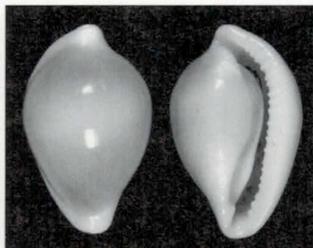
**NEUE  
CYPRAEEN  
UND  
OVULIDEN**



# Conchylia

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*Diminovula sandrae* n. sp. Holotype. Carless Reef, Hurghada

# Three new species of Ovulidae from the Red Sea (Mollusca: Gastropoda)

By FELIX LORENZ & DIRK FEHSE

Buseck-Beuern & Berlin (Germany)

14 Text-Figs; 3 Plates

## Zusammenfassung

Drei neue Ovulidae von Hurghada, Ägypten, werden beschrieben und mit ihren nächsten Verwandten verglichen: *Prosimnia hepcae* n. sp. mit den übrigen Arten der Gattung, *Naviculavolva debelius* n. sp. mit *N. massierorum* (FEHSE, 1999) aus dem westlichen Indischen Ozean und *Diminovula sandrae* n. sp. mit *Pseudosimnia carnea* aus dem Mittelmeer und *P. wieseorum* von Ostafrika sowie mit *D. whitworthi* und *D. coroniola* vom zentralen Indopazifik.

## Abstract

Three new species of Ovulidae are described from Hurghada, Egypt, and compared with related species: *Prosimnia hepcae* n. sp. with its congeners; *Naviculavolva debelius* n. sp. with *N. massierorum* (FEHSE, 1999) from the western Indian Ocean and *Diminovula sandrae* n. sp. with the Mediterranean *Pseudosimnia carnea* and *P. wieseorum* from East Africa as well as *D. whitworthi* and *D. coroniola* from the central Indopacific.

## Keywords

Ovulidae, *Prosimnia hepcae*, *Naviculavolva debelius*, *Diminovula sandrae*, new species, Hurghada, Red Sea

## Introduction

The area around Hurghada, Egypt, in the northern Red Sea is among the most popular spots for diving-tourism. Yet, the Ovulidae-fauna of the Red Sea had been poorly known, mainly because of the lack of attention given to this fascinating group of marine gastropods. Recently, the first author was able to trigger the interest of attentive underwater-photographers, who managed to fill many gaps in our knowledge of the Ovulidae from the Red Sea. One new species, *Archivolva kahlbrocki* LORENZ, 2009 has been the first product of this fruitful cooperation. The three new species from Red Sea described herein were discovered by the first author and his team within the past two years.

## Abbreviations

DFB – collection DIRK FEHSE, Berlin, Germany

FL – collection FELIX LORENZ, Buseck, Germany

HEPCA – Hurghada Environmental Protection and Conservation Association

MNHN – Muséum National d'Histoire Naturelle, Paris, France

L – length

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## Plate 1 (see page 11):

Fig. 1: *Prosimnia hepcae* n. sp. Holotype. Wreck of the *MV Thistlegorm*, Egypt, at 35 m. Coll. MNHN, No. 23120.

Fig. 2: *Prosimnia hepcae* n. sp. Paratype 1. Carless Reef, Hurghada, Egypt, at 38 m. Coll. FL.

Fig. 3: *Prosimnia hepcae* n. sp. Paratype 2. Carless Reef, Hurghada, Egypt, at 38 m. Coll. DFB, No. 10294.

Fig. 4: *Prosimnia hepcae* n. sp. Paratype 3. Wreck of the *MV Thistlegorm*, Egypt, at 35 m. Coll. FL.

Fig. 5: *Prosimnia korkosi* FEHSE, 2005. Erg Camel, Hurghada, Egypt, at 6-8 m. Coll. FL.

Fig. 6: *Prosimnia korkosi* FEHSE, 2005. Erg Camel, Hurghada, Egypt, at 6-8 m. Coll. FL.

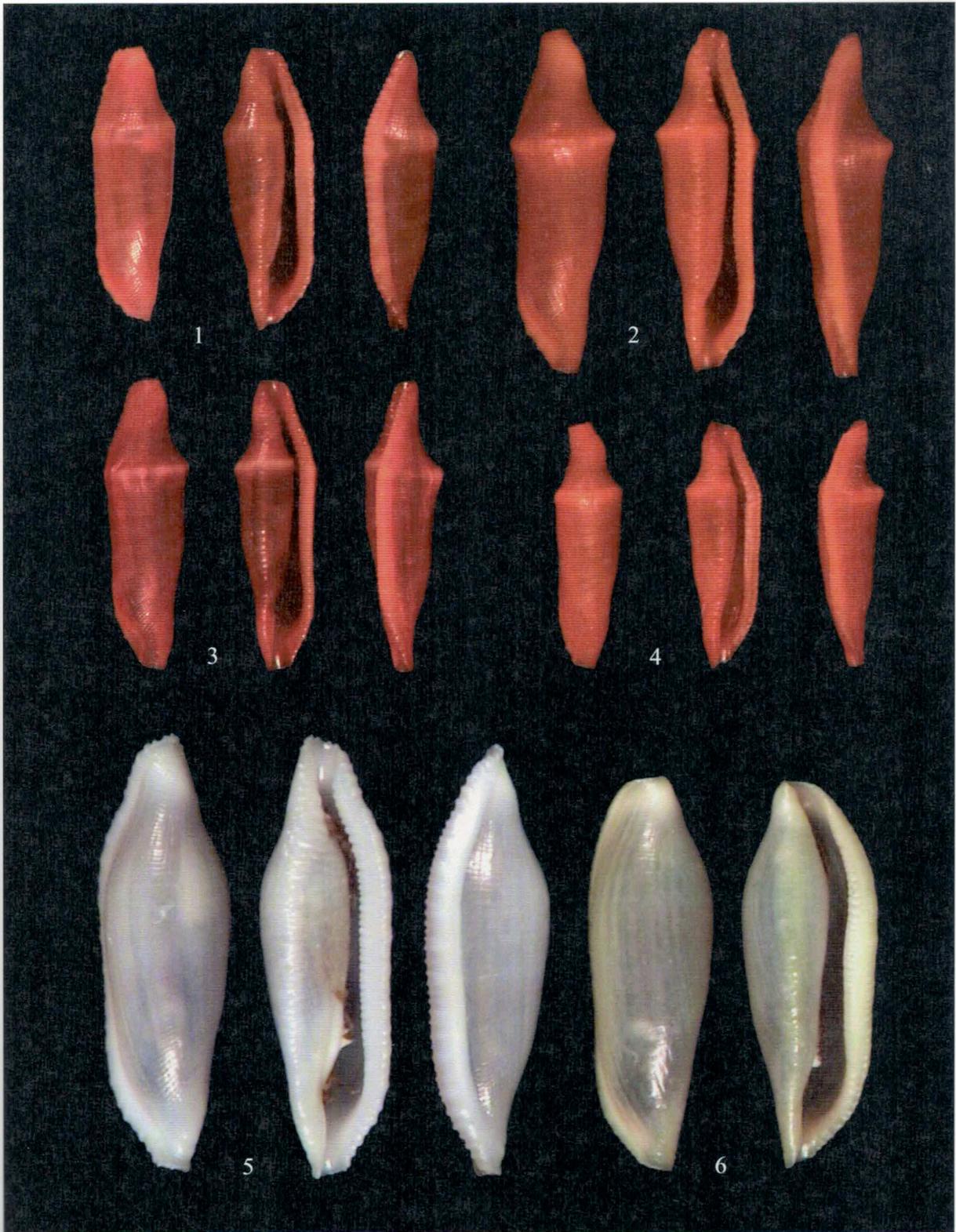


Plate 1 (Explanation see page 10)

***Prosimnia hepcae* n. sp.**

(Plate 1, Figs 1-4, Text-Figs 7-10)

**Material:** Twenty-five live taken and two fossil specimens.

**Holotype:** L = 6.8 mm. Wreck of the *MV Thistlegorm*, Egypt, at 35 m. Coll. MNHN, No. 23120.

**Paratype 1:** L = 8.3 mm. Carless Reef, Hurghada, Egypt, at 38 m. Coll. FL.

**Paratype 2:** L = 7.0 mm. Carless Reef, Hurghada, Egypt, at 38 m. Coll. DFB, No. 10294.

**Paratype 3:** L = 5.9 mm. Wreck of the *MV Thistlegorm*, Egypt, at 35 m. Coll. FL.

**Paratype 4:** L = 5.6 mm. Pleistocene; excavations between 7 km N & S of Hurghada, Egypt. Coll. DFB, No. 6245-1.

**Paratype 5:** L = 5.7 mm. Pleistocene; excavations between 7 km N & S of Hurghada, Egypt. Coll. DFB, No. 6245-2.

And Twenty-one unnumbered paratypes in coll. FL.

**Description:** Shell very small (4.6 – 8.3 mm) but rather solid, opaque, very slender, with numerous costulae on transverse dorsal ridge. Terminals elongated and slightly recurved with blunt tips. Transverse dorsal striae numerous, very fine, equally spaced, only slightly incised. Dorsal elevation highest towards the posterior third. Ventrum rounded, slightly callused, smooth and glossy with a longitudinal, crenulated ridge on mid-ventrum joining funiculum and terminal ridge. Aperture long, narrow, widening at fossular section. Anal and siphonal canal narrow, slightly indented. Labrum narrow, flattened, crenulated, tapering steeply inward, anteriorly declivous. Apertural labral margin angular, densely denticulate or even corrugated. Outer labral margin slightly, roundly callused and also denticulate or corrugated. Columella elongated and rounded. Terminal ridge elongated and crenulated. Fossula not developed, indicated by a short adaxial carinal ridge. Funiculum on rear ventrum slightly developed, finely ribbed.

Shell colour red-brown, dorsal keel and labrum paler, with three narrow paler transverse bands below.

**Variation:** The paratypes show identical features. The colour varies from dark purple to orange. Most specimens are red-brown as the holotype. The development of the dorsal keel and its costulae vary slightly.



**Text-Fig. 7:** *Prosimnia hepcae* n. sp. Living animals in situ. Vicinity of Hurghada, Egypt. (photo: SVEN KAHLBROCK).

**Animal morphology and colouration:** The living animal has a thin, transparent mantle with patches of orange ornamentation. There are few large, wart-like papillae with fine dendrites at their tips. The foot is white with numerous elongate red dots. The tentacles are yellow with two red bands. The cephalic siphon is translucent yellow.

**Distribution and Habitat:** *Prosimnia hepcae* n. sp. is found in various places in the vicinity of Hurghada, Egypt, as well as the wreck of the *MV Thistlegorm* (27° 48' 51" N, 33° 55' 12" E) off the Sinai coast, in caves and ledges, in sheltered areas of the reef, at depths ranging from 20 to 50 m, usually in small groups (figs. 7-10). The host is always a species of *Acabaria* J. E. GRAY, 1859 with a classic fan-shaped growth.

**Etymology:** *Prosimnia hepcae* is named in honour of the Hurghada Environmental Protection and Conservation Association, a non-government organization protecting and preserving the natural resources of the Red Sea and Egypt. Without the activities of HEPCA, boats would still anchor on reefs, garbage would be dumped and sharks could be hunted without anybody interfering. Despite the mass diving tourism in the vicinity of Hurghada, the sea is incredibly rich

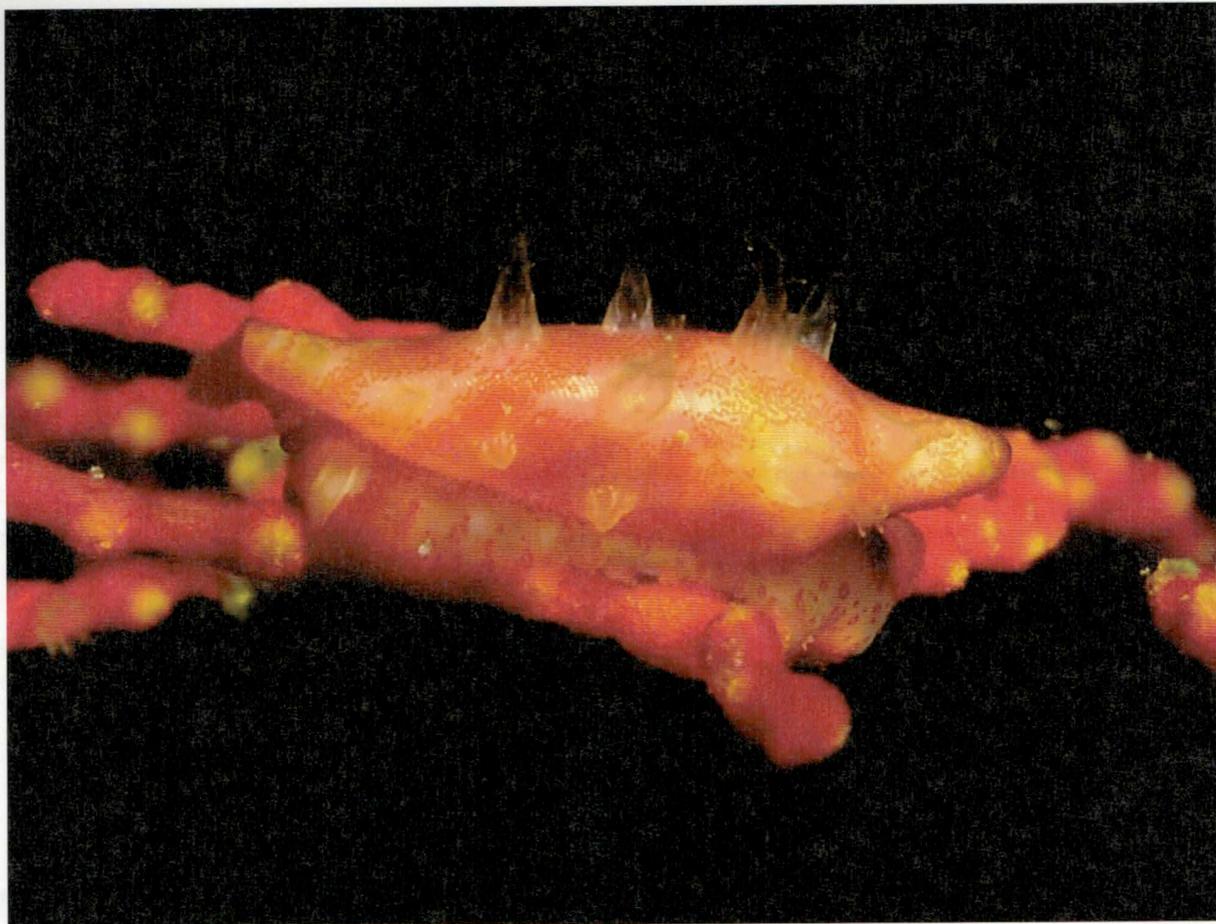
in marine life of all sorts, new species included.

**Discussion:** The new species differs from its congener *P. korkosi* FEHSE, 2005 (Pl. 1, Figs 5-6) from the same area by having a distinct dorsal keel, slightly coarser dorsal striae giving the shells a dull instead of glossy appearance, by a the more solid, not transparent shell which is usually of darker colour, whereas *P. korkosi* varies from transparent white to lemon yellow, rarely pale orange or pale pink. The posterior extremity is usually more projecting than in *P. korkosi*. That species lives on *Acabaria variabilis* (HICKSON, 1905) colonies that are not fan-shaped but which form a bush-like network that is usually found loosely attached to shallow, exposed parts of the reef, at 5 to 10 m (Pl. 1 Figs 11-12). The animal of *P. korkosi* differs by having finer and more numerous papillae which are usually stained darker than the mantle.

Separating the new species from its Indo-Pacific congeners presents no difficulty on account of the fine incised striae which are not found in *P. semperi* (WEINKAUFF, 1881), *P. boshuensis* CATE, 1973, *P. draconis* CATE, 1973 and *P. piriei* (PETUCH, 1973), all of which have a reticulated sculpture.



**Text-Fig. 8:** *Prosimnia hepcae* n. sp. Living animals in situ. Vicinity of Hurghada, Egypt. (photo: SVEN KAHLBROCK).



Text-Fig. 9: *Prosimnia hepcae* n. sp. Living animals in situ. Vicinity of Hurghada, Egypt. (photo: SVEN KAHLBROCK).



Text-Fig. 10: *Prosimnia hepcae* n. sp. Living animals in situ. Vicinity of Hurghada, Egypt. (photo: SVEN KAHLBROCK).



**Text-Fig. 11:** *Prosimnia korkosi* FEHSE, 2005. Living animals in situ. Erg Camel, Hurghada, Egypt, at 6-8 m. (photo: JANA KRATZSCH and FELIX LORENZ).



**Text-Fig. 12:** *Prosimnia korkosi* FEHSE, 2005. Living animals in situ. Erg Camel, Hurghada, Egypt, at 6-8 m. (photo: JANA KRATZSCH and FELIX LORENZ).

*Naviculavolva debelius* n. sp.

(Plate 1, Figs 13-14, Plate 2, Figs. 15-20)

**Material:** Twenty live taken adult and several subadult specimens from Banana Reef, Hurghada (27° 13.26' N, 33° 57.05' E). Several other specimens from various localities in the vicinity of Hurghada.

**Holotype:** L= 13.5 mm. Banana Reef, Hurghada, at 10 m. Coll. MNHN, No. 23264.

**Paratype 1:** L= 13.1 mm. Fanadir Reef, Hurghada, at 8 m. Coll. FL.

**Paratype 2:** L= 13.8 mm. Banana Reef, Hurghada, at 10 m. Coll. FL.

**Paratype 3:** L= 11.7 mm. Banana Reef, Hurghada, at 10 m. Coll. DFB, No. 10388-1.

**Paratype 4:** L= 10.6 mm. Banana Reef, Hurghada, at 10 m. Coll. DFB, No. 10388-2.

**Paratype 5:** L= 13.6 mm. Banana Reef, Hurghada, at 10 m. Coll. FL.

**Paratype 6:** L= 7.3 mm. Arabella Azur House Reef, Hurghada, at 7 m. Coll. FL.

And 18 further paratypes from Banana Reef, Hurghada, at 10 m in the collection of the first author.

**Description:** Shell of very small to medium size (7.3 – 13.8 mm), rather spindle shaped, solid, less inflated. Terminals slightly elongated with blunt anterior and pointed posterior tip. Dorsum slightly elevated at mid-portion, dull with many fine, somewhat irregular growth lines and very fine, incised striae on terminal collars. Ventrums convex, callused, glossy, sloping slightly into aperture. Ventral margin roundly callused. Funiculum on rear ventrum less developed, somewhat callused, smooth, slightly projected. Terminal ridge absent. Aperture long, narrow, widening essentially at fossular section. Anal canal very narrow, elongated, without any peculiarities. Siphonal canal broad, indented. Labrum broad, flattened, semi-circularly constricted at fossular section, tapering regularly towards anal canal. Outer labral margin roundly callused. Apertural labral margin roundly edged with weak crenulation posteriorly. Parietal lip less developed, slightly roundly edged. Columella curved, slopes steeply into aperture with less developed carinal ridge. Fossula not developed, indicated by the slightly widened carinal ridge.

Shell colour dorsally violet-grey to pale yellow with terminal collars and mid-dorsum of lighter shades. Ventrums, labrum, columella, fossula and carinal ridge white to light rose. Canals rich rose to white in pale yellow specimens.



**Text-Fig. 13:** *Naviculavolva debelius* n. sp. Living animals in situ. Banana Reef, Hurghada, at 10 m. (photo: SVEN KAHLBROCK).



Text-Fig. 14: *Naviculavolva debelius* n. sp. Living animals in situ. Banana Reef, Hurghada, at 10 m. (photo: SVEN KAHLBROCK).

**Variation:** The general shape varies slightly. Larger shells tend to be more pointed posteriorly than smaller ones. Some specimens are considerably more slender. The general colour varies from saturate violet-grey to pale yellow. None of the specimens available for study show traces of a suture line. Even in yellow specimens, the shell's interior is more or less violet, especially inside the canals.

**Animal morphology and colouration:** The living animal has a thin, transparent mantle without papillae. The foot is opaque white to light yellow with a bright yellow longitudinal line on its tale. The tentacles are yellow with white tips and two red bands towards their posterior end as well as a red line reaching from the small black eye to the red bands. The cephalic siphon is opaque yellow.

**Distribution and Habitat:** *Naviculavolva debelius* n. sp. lives in small aggregations of subadult and adult shells, very well hidden in narrow crevices between the branches of large colonies of *Rumphella torta* (KLUNZINGER, 1877) growing on clean sand at 8-15 m. Every habitat around Hurghada with these conditions and the presence of the host may potentially be inhabited with *N. debelius*, but finding it on its host is very difficult. The animals leave their hiding places at night-time and only then may be observed exposed on their host.

**Etymology:** Named in honour of HELMUT DEBELIUS, world world renowned author of colourful and educational books on various aspects of marine life, and personal friend of the first author.

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Plate 2 (see page 18):

Fig. 15: *Naviculavolva debelius* n. sp. Holotype. Banana Reef, Hurghada, at 10 m. Coll. MNHN, No. 23264.

Fig. 16: *Naviculavolva debelius* n. sp. Paratype 5. Banana Reef, Hurghada, at 10 m. Coll. FL. Somewhat malformed.

Fig. 17: *Naviculavolva debelius* n. sp. Paratype 1. Banana Reef, Hurghada, at 10 m. Coll. FL.

Fig. 18: *Naviculavolva debelius* n. sp. Paratype 6. Arabella Azur House Reef, Hurghada, at 7 m. Coll. FL.

Most probably a male shell.

Fig. 19: *Naviculavolva debelius* n. sp. Paratype 3. Banana Reef, Hurghada, at 10 m. Coll. FL.

Fig. 20: *Naviculavolva debelius* n. sp. Paratype 4. Banana Reef, Hurghada, at 10 m. Coll. DFB, No. 10388-2.

Figs 21-22: *Naviculavolva massierorum* (FEHSE, 1999), off Nacala Bay, N Mozambique. Coll. FL.

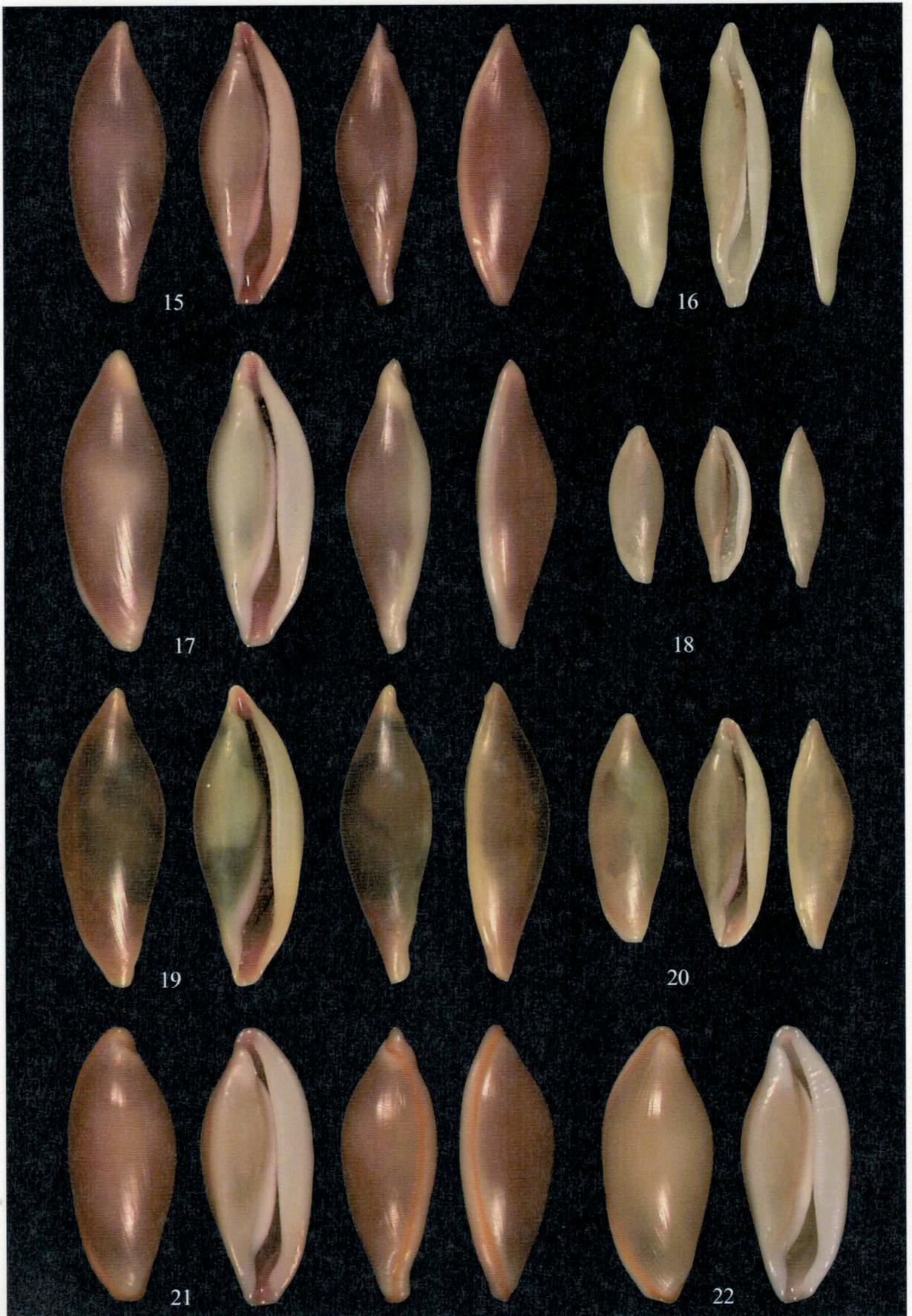


Plate 2 (Explanation see page 17)



Plate 3 (Explanation see page 20)

**Discussion:** The adjacent isolate geographic position of the northern Red Sea suggests that the closest living relative of *N. debelius* n. sp. is *N. massierorum* (FEHSE, 1999) (Plate 2, Figs 21-22, the only member of the genus from the Western Indian Ocean. The conchological differences to that species are subtle but consistent: *N. debelius* completely lacks a yellow or orange suture-band characteristic for *N. massierorum* and other Pacific congeners. Furthermore, the terminals are more elongated, the posterior terminal tip of *N. debelius* is more pointed, the anal canal more elongated and not peculiarly shaped, the labrum narrower, the funiculum, carinal ridge and fossula less developed than in *N. massierorum*.

***Diminovula sandrae* n. sp.**

(Plate 3, Figs 23-29; Text-Figs 30-X)

2009 *Diminovula* cf. *whitworthi* – LORENZ & FEHSE, The Living Ovulidae ....: pl. 46, fig. 2.

**Material:** Ten live collected specimens from various places in the northern Red Sea.

**Holotype:** L= 10.5 mm. Carless Reef, Hurghada, at 10 m. Coll. MNHN, No. 23282.

**Paratype 1:** L= 15.3 mm. Off Eilat, Gulf of Aqaba, Jordan. Coll. DFB, No. 7230.

**Paratype 2:** L= 11.2 mm. Fanadir Reef, Hurghada, at 15 m. Coll. FL.

**Paratype 3:** L= 10.1 mm. Giftun Is., Hurghada, at 25 m.



**Text-Fig. 30:** *Diminovula sandrae* n. sp. Living animals in situ. Hurghada, at 10-20 m. (photo: SVEN KAHLBROCK).

**Plate 3 (see Page 19):**

**Fig. 23:** *Diminovula sandrae* n. sp. Holotype. Carless Reef, Hurghada, at 15 m. Coll. MNHN, No. 23282.

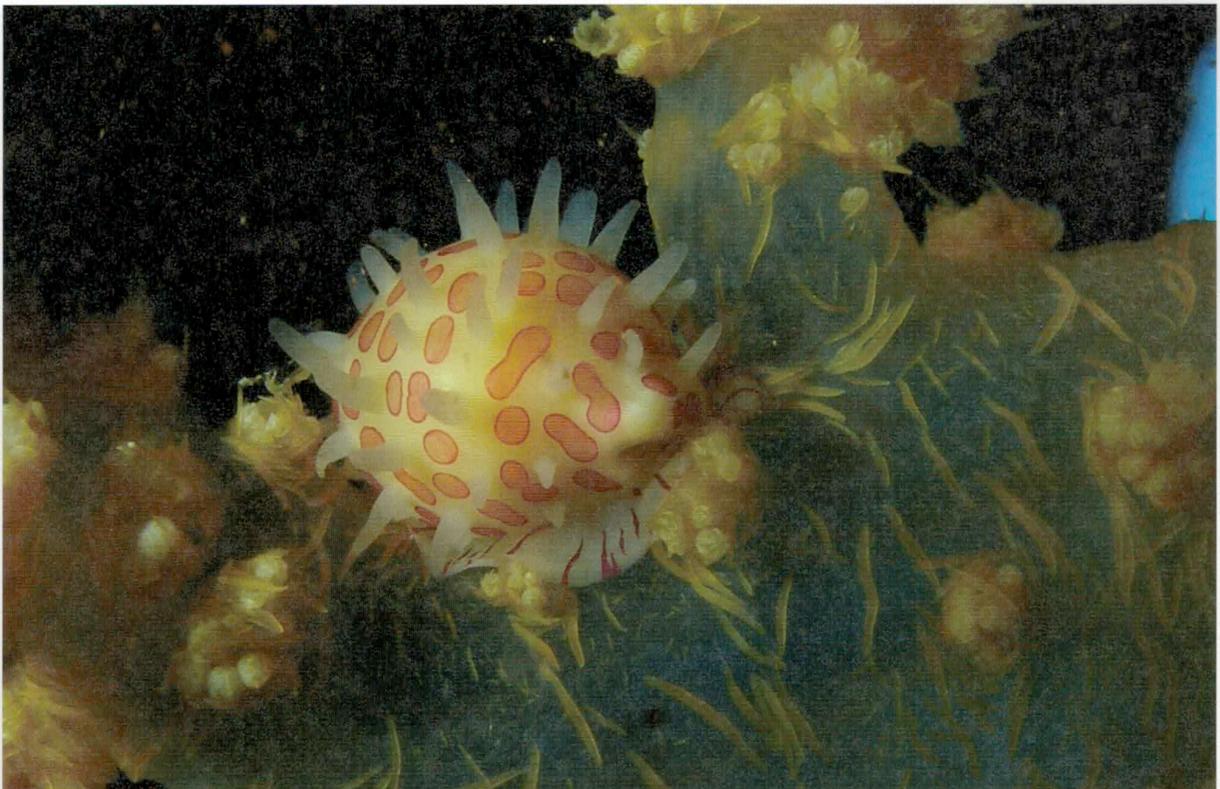
**Fig. 24:** *Diminovula sandrae* n. sp. Paratype 2. Fanadir Reef, Hurghada, at 15 m. Coll. FL.

**Fig. 25:** *Diminovula sandrae* n. sp. Paratype 1. Off Eilat, Gulf of Aqaba, Jordan. Coll. DFB, No. 7230.

**Fig. 26:** *Diminovula sandrae* n. sp. Paratype 3. Giftun Is., Hurghada, at 25 m.

**Fig. 27:** *Diminovula sandrae* n. sp. Paratype 4. Stone Beach, Giftun Is., Hurghada, at 30 m.

**Figs 28-29:** *Diminovula sandrae* n. sp. Paratypes 5 and 6. Carless Reef, Hurghada, at 10 m.



**Text-Fig. 31:** *Diminovula sandrae* n. sp. Living animals in situ. Hurghada, at 10-20 m. (photo: SVEN KAHLBROCK).

**Paratype 4:** L= 9.0 mm. Stone Beach, Giftun Is., Hurghada, at 30 m.

**Paratype 5:** L= 6.1 mm. Carless Reef, Hurghada, at 10 m.

**Paratype 6:** L= 5,3 mm. Carless Reef, Hurghada, at 10 m.

And 3 further paratypes from the vicinity of Hurghada in the collection of Dr. PHIL NUDELMAN.

**Description:** Shell of small to medium size (5.3 – 15.3 mm), ovate, solid. Terminal slightly elongated with almost blunt anterior and rounded posterior tip. Dorsum highly elevated near to mid-portion, smooth, glossy, incised striae on terminal collars. Ventrums slightly convex, rather callused, glossy. Funiculum triangular, callused, crenulated, projecting. Terminal ridge developed. Aperture long, posteriorly curved, fairly narrow, widening essentially at fossular section. Anal canal very narrow, indented. Siphonal canal broader, indented. Labrum narrow, rounded, finely and irregularly crenulated. Outer labral margin roundly callused with a granulose microstructure. Apertural labral margin edged with fine dentition over entire length. Parietal lip less developed, slightly roundly edged. Columella strongly curved, slopes steeply into aperture with less developed carinal ridge. Fossula broad, shallow, with a slightly protruded inner fossular edge as extension of the carinal ridge.

Ground colour of shell dorsally dark red-brown, rose-brown to yellow-brown, terminal collars with lighter shades of pink. There are three slightly more saturate transverse zones of variable width, forming broader areas that appear as three irregular blotches. The darker bands are superimposed by a very inconspicuous narrow brown transverse line. Columella, fossula and ventrum orange brown. Labrum, funiculum and carinal ridge white to light rose. Apertural labral edge light rose to orange. Canals rich rose. There is a narrow, inconspicuous suture line visible towards and above the terminals.

**Variation:** The general shape varies slightly from inflated pyriform to elongated ovate. The general colour varies from dark purple to brown and shades of rose-brown to shades of yellow-brown. The yellow suture line is mostly faint and present only towards the terminals. The narrow brown transverse lines running within the darker zones vary in their intensity. In freshly collected, darker shells they are less obvious than in faded specimens.

**Animal morphology and colouration:** Mantle tissue translucent white covered with small, numerous, red-brown rings with orange to rose centres and many opaque white wart-like papillae. The rings are irregular in shape, often tear-shaped in outline. Foot opaque white with crimson stripes all around of the margin. The tentacles are orange to rose with white tips. The cephalic siphon is opaque orange to dark rose with even darker shades toward its margin.



Text-Fig. 32: *Diminovula sandrae* n. sp. Living animals in situ. Hurghada, at 10-20 m. (photo: SVEN KAHLBROCK).

**Distribution and Habitat:** *Diminovula sandrae* n. sp. is only known from the northern Red Sea, the vicinity of Hurghada, Egypt and Eilat, in the Gulf of Aqaba. The animals are living hidden among *Dendronephthya klunzingeri* STUDER, 1888 at 8 to 30 m. Encounters with this *Diminovula* in the Red Sea are far less common than with its congeners in similar habitats in the Indo-Pacific.

**Etymology:** Named in honour of SANDRA NUDELMAN of Seattle, WA, USA. SANDRA and her husband Dr. PHIL NUDELMAN are dear friends of the first author.

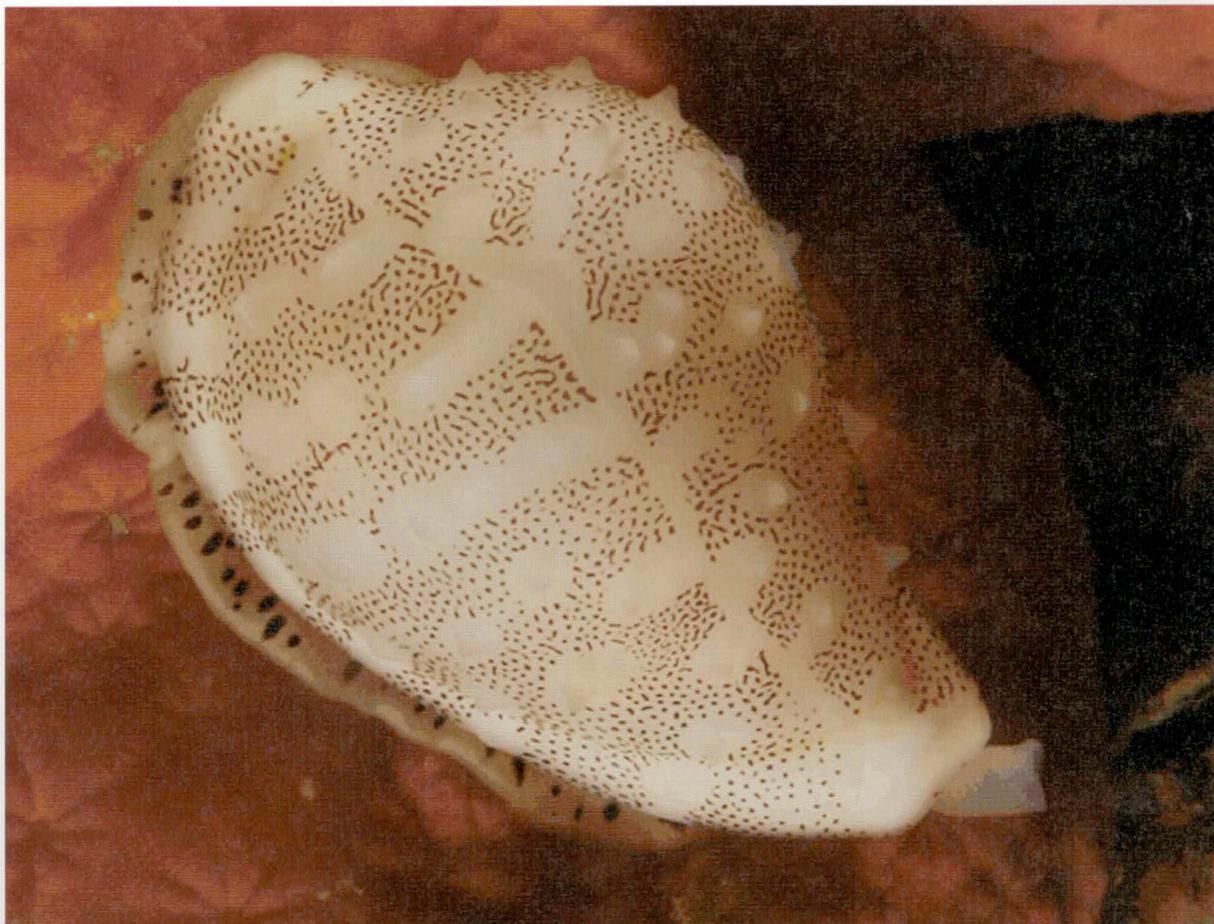
**Discussion:** The assignment of the new species to the genus *Diminovula* IREDALE, 1930 is mainly based on the animal morphology. According to the occurrence of *D. sandrae* n. sp. in the northern Red Sea and its shell coloration the suggestion of its closest living relatives would be the Mediterranean *Pseudosimnia carnea* (POIRET, 1789) (Text-Fig. 3) and *P. wieseorum* LORENZ, 1981 from E Africa. But the colour pattern and the papillae on the mantle lobes of *D. sandrae* n. sp. differs essentially from *P. carnea* (the type species of the genus *Pseudosimnia* SCHILDER, 1925) and is similar to *D. alabaster* (the type species of the genus *Diminovula* IREDALE, 1930). *Pseudosimnia carnea* and *P. wieseorum* are conchologically distinguishable from *D. sandrae* n. sp. especially by their more developed labral denticles and almost obscured carinal ridge.

*Diminovula sandrae* n. sp. differs from *D. whitworthi* CATE, 1973 by the more inflated shell, the smooth dorsum and the less conspicuous dorsal coloration. The new species is distinguished from *D. coroniola* (CATE, 1973) by the stocky shell, the narrower aperture, less developed labral crenulation and obsolete denticles. The heavily calloused

specimen depicted in LORENZ & FEHSE (2009: pl. 46, fig. 2) as *D. cf. whitworthi* obviously belongs to the new species described herein.

The faint narrow brown lines that are often visible within the three darker brown bands of *D. sandrae* n. sp. remind us of two congeners from the Indian Ocean, *D. bilineata* (BOZZETTI, 2009) **comb. nov.** from Madagascar and *D. rosadoi* LORENZ & FEHSE, 2009 from Mozambique. Both show two conspicuous narrow transverse lines, while lacking the three darker brownish zones. Their shell morphologies differ considerably from *D. sandrae* n. sp., but it is interesting to see that all three western species show the tendency to form narrow transverse lines opposed to their Pacific congeners. The same is true for *Margovula crawfordcatei* LORENZ & FEHSE, 2009 from East Africa, which is considered only remotely related to *Diminovula*: it often has two brown transverse lines whereas it is otherwise similar to its Pacific sister *M. marginata* (G. B. SOWERBY I, 1828). The latter never shows this feature. It is quite amazing to notice that such a subtlety in the shell colouration, not even visible in the living animal, seems to make a big selective difference between the Pacific and the Indian Ocean.

**Remarks:** During the preparation of our book "The Living Ovulidae" (2009), the northern Red Sea was a white dot on the map in terms of our knowledge of the local Ovulidae. Six Ovulid species have been newly described from the Red Sea in recent years: *Prosimnia korkosi*, *Diminovula fainzilberi* FEHSE in LORENZ & FEHSE, 2009, *Archivolva kahlbrocki* LORENZ, 2009 and now *Prosimnia hepcae*, *Naviculavolva debelius* and *Diminovula sandrae*. At least one more has just been discovered and is presently under study.



**Text-Fig. 33:** *Pseudosimnia carnea* (POIRET, 1789). Living animal in situ. Off Galicia, Spain. (photo: JUAN E. TRIGO).

Many species thought to be absent in the Red Sea have been documented just now. A comprehensive report dealing with the Ovulidae of the Red Sea is in preparation. The recent discoveries impressively demonstrate two things: 1) the northern Red Sea shows a high degree of endemism due to its geographic remoteness from the remaining Indo-Pacific, but also a considerable variety of Indo-Pacific species, and 2) that the intense activities to protect the area has also resulted in a fragmentary knowledge of certain molluscan families. The protection of the popular tourist destinations around Hurghada should remain in the focus of attention and more so in the light of the new discoveries.

#### Acknowledgements

Special thanks to SVEN KAHLBROCK and ALEXANDER "Brownie" BRÖTZ, to JAMES & MAC Diving, AMR ALI and the team of HEPCA, JUAN E. TRIGO, PHIL and SANDRA NUDELMAN, and to JANA KRATZSCH.

#### References

- BOZZETTI, L. (2009). *Pseudosimnia bilineata*. – Malacologia Mostra Mondiale, **64** (3): 17-18.
- FEHSE, D., TRIGO, J. E., DIESTE, J. P. & ALDREY, J. M. (2010): Three new records of the family Ovulidae for Galicia (NW Spain) and discussions on their valid nomenclature. – *Gloriamaris*, **49** (5/6): 141-153.
- LORENZ, F. & FEHSE, D. (2009): The living Ovulidae. A manual of the families of allied cowries: Ovulidae, Pediculariidae and Eocypraeidae. – Hackenheim (ConchBooks): 651 pp., 203 pls., 375 + numerous unnumb. text figs.
- LORENZ, F. (2009): A new species of *Archivolva* from the Red Sea (Gastropoda: Ovulidae). – *Conchylia*, **40** (1/2): 51-55, text figs. 1-4.

#### Addresses of the authors:

Dr. FELIX LORENZ  
Friedrich-Ebert-Str. 12; D-35418 Buseck-Beuern, Germany  
e-mail: felix@cowries.info

Dipl. Ing. DIRK FEHSE  
Nippeser Str. 3; D-12524 Berlin, Germany  
e-mail: dirk.fehse@rohde-schwarz.com



**Text-Fig. 34:** *Diminovula fainzilberi* FEHSE in LORENZ & FEHSE, 2009. Living animals in situ. Hurghada, at 8-10 m. (photo: SVEN KAHLBROCK).



**Text-Fig. 35:** *Diminovula fainzilberi* FEHSE in LORENZ & FEHSE, 2009. Living animals in situ. Hurghada, at 8-10 m. (photo: SVEN KAHLBROCK).