

## Inventory of the specimens of the Class Crinoidea (Echinodermata) deposited at the Invertebrates collection at the Museo Argentino de Ciencias Naturales “Bernardino Rivadavia”

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**Abstract:** The invertebrate collection of the Museo Argentino de Ciencias Naturales “Bernardino Rivadavia” (MACN-In) is one of the most important in Latin America. It has more than 1411 type batches with ~90 type specimens of echinoderms. For the present study we analyzed 56 lots of crinoids from the MACN-In. We also checked and updated the identification, when necessary. Seven species belonging to 6 genera were identified; 23 specimens remain unidentified. The diversity of crinoids for Chile, Uruguay and Brazil and Antarctica is discussed. The MACN-In has several lots of crinoids from different parts of the world and numerous specimens of the 2 representative species from Argentina, *Isometra vivipara* Mortensen, 1917 and *Phrixometra nutrix* (Mortensen, 1918). This is the first published inventory of crinoids from samples deposited at the MACN-In collection, which will be a useful tool for future studies regarding echinoderms, particularly crinoids.

**Key words:** crinoids, Argentina, Antarctica, MACN-In, lots.

**Resumen:** Inventario de los ejemplares de Clase Crinoidea (Echinodermata) en la colección de Invertebrados del Museo Argentino de Ciencias Naturales “Bernardino Rivadavia”. La colección de invertebrados del Museo Argentino de Ciencias Naturales “Bernardino Rivadavia” (MACN-In) es una de las más importantes de América Latina. Tiene más de 1411 lotes tipo con ~90 ejemplares tipo de equinodermos. Para el presente estudio analizamos 56 lotes de crinoideos del MACN-In. También verificamos y actualizamos la identificación, cuando fue necesario. Siete especies pertenecientes a 6 géneros; 23 especímenes permanecen sin identificar. Se discutió la diversidad de crinoideos para Chile, Uruguay, Brasil y Antártida. El MACN-In cuenta con varios lotes de crinoideos de diferentes partes del mundo y numerosos ejemplares de las 2 especies representativas de Argentina, *Isometra vivipara* Mortensen, 1917 y *Phrixometra nutrix* (Mortensen, 1918). Este es el primer inventario publicado de crinoideos a partir de muestras depositadas en la colección MACN-In, el cual será una herramienta útil para futuros estudios sobre equinodermos, particularmente crinoideos.

**Palabras clave:** crinoideos, Argentina, Antártida, MACN-In, lotes

### INTRODUCTION

The Museo Argentino de Ciencias Naturales “Bernardino Rivadavia” (MACN) is one of the most important museums of Latin America, with 23 national collections, including the MACN-In (“Colección Nacional de Invertebrados”). This collection has more than 1411 type lots, with more than ~90 type specimens of echinoderms (Tablado & Venerus, 2000; Tablado & Mantinián, 2004; Miquel *et al.*, 2007). Biodiversity research of echinoderms from South America increased in the last years (Alvarado & Solís-Marín, 2013). Particularly, for the Argentine Sea, several re-

searchers have been studying their reproductive, ecological, biogeographical, taxonomical, and physiological aspects (Brogger *et al.*, 2013; Martínez *et al.*, 2015; Pertossi *et al.*, 2019). Echinoderms in Argentina are represented by 126 species, where Asteroidea and Ophiuroidea are the most representative groups (Brogger *et al.*, 2013).

The Class Crinoidea is one of the five current classes in the phylum Echinodermata with ~670 living species, distributed in all oceans (WoRMS Editorial Board, accessed 26 July 2021). The most diverse group within this class is Comatulida, commonly called “feather

stars” or “unstaked crinoids”. It is represented by approximately 140 genera and ~500 species. Nevertheless, unstaked crinoids are not ontogenetically accurate because the adult of comatulids retains the proximal portion of the juvenile stalk (Hyman, 1955; Hendler *et al.*, 1995; Messing, 1997), i.e., a large modified centro-dorsal ossicle that represents a reduced stalk (Hendler *et al.*, 1995; Cohen *et al.*, 2004; Pawson, 2007). In Argentina, the research on crinoids is very scarce. Andersson (1904), Mortensen (1917, 1918, 1920), John (1938), Clark and Clark (1967) and, Speel and Dearborn (1983) began studying the reproduction and taxonomy of *Isometra vivipara* Mortensen, 1917 and *Phrixometra nutrix* (Mortensen, 1918), whereas Tommasi described *I. vivipara* with specimens from Brazil (Tommasi 1969, Tommasi *et al.*, 1988d). But, in Argentina, Bernasconi was the first researcher to study echinoderms (Bernasconi 1932, 1934), including the Antarctic species *Promachocrinus kerguelensis*. Pertossi *et al.* (2019) studied the reproduction and developmental stages of the crinoid *I. vivipara*. There are only two species of comatulid crinoids recorded in Argentina: *Isometra vivipara* and *Phrixometra nutrix*, included in the Family Antedonidea (Brogger *et al.*, 2013). The knowledge on taxonomy, biology, and ecology of crinoids in South America is limited (Tommasi, 1969; Bohn, 2009; Martínez *et al.*, 2018; Martínez, 2013; Ventura *et al.*, 2013; Catalán *et al.*, 2020), probably due to the lack of researchers working on this group. Furthermore, considering that crinoids are deep-sea animals, the access to the samples is not always easy and has higher costs than studying coastal or shallow water species (Eleáume *et al.*, 2014, Ventura *et al.*, 2013).

The present contribution aims to provide a complete inventory of the specimens of the Class Crinoidea deposited at the National Invertebrates collection of the Museo Argentino de Ciencias Naturales “Bernardino Rivadavia” (MACN-In). The specimens of echinoderms present in Argentina according to Brogger *et al.* (2013) were compared with the latest database of MACN-In. Moreover, we examined and updated their identifications and records.

## MATERIAL AND METHODS

We studied 56 lots of crinoids from the MACN-In. Observations were carried out under a stereoscopic microscope; images were taken with a Stereo Discovery.V20 and an Axiocam HRc digital camera. All diagnostic characters

were analyzed in detail i.e., the cirri, basal, radial and axillary ossicles (IBr1-IBr2) oral pinnules (P1-P2-P3), genital pinnules (Pg), and arm number. We analyzed all the information of each specimen from the collection database (Pennant, 1777; Lamarck, 1816; Pourtalès, 1868; Carpenter, 1888; Bernasconi 1932, 1934; John, 1938; Clark & Clark, 1967; Mortensen, 1917; Mortensen, 1918; WoRMS Editorial Board, accessed 26 July 2021). The location of each specimen was represented on a map (Fig. 1). Complementarily, we provided images of the two crinoid species recorded in Argentina, *Isometra vivipara* and *Phrixometra nutrix* (Fig. 2) and very well represented in this collection. All this data from the MACN-In specimens was compared with those described in near water areas, including Chile, Brazil, Uruguay and Antarctica. Finally, we compared the specimens of echinoderms present in Argentina according to Brogger *et al.* (2013) with the latest database of the MACN-In.

## RESULTS

The 56 studied lots of crinoids deposited at the MACN-In were composed of 286 specimens from 7 species belonging to 6 genera and 4 families: Antedonidae, Charitometridae, Comatulidae, and Tropiometridae, all of them belonging to the order Comatulida. For all the identified specimens we observed and provided below the diagnostic characters to corroborate their identification. The specimens studied here came from different locations, including Argentina, Antarctica, Brazil, Cuba, Japan, and the Mediterranean Sea (Fig. 1). Although several specimens were identified, 23 remained unidentified, mainly due to their poor state of preservation. They were damaged and parts were missing (i.e., cirri, arms, and centro-dorsal ossicles), which made it impossible to observe diagnostic characters. The two species described for Argentina, *Isometra vivipara*, and *Phrixometra nutrix* (Fig. 2), are well represented in the collection with 256 specimens (Table 1). In addition, 74 of the 126 species of echinoderm present in Argentina are registered in the MACN-In collection, being the classes Crinoidea and Echinoidea the most represented (Table 2).

### Crinoids from the MACN-In

*Antedon bifida bifida* (Pennant, 1777)

**Studied material.** MACN-In 4300, 1 specimen, 1898, label: “Mar Mediterráneo” (Mediterranean Sea). It was acquired by the MACN through a



Fig. 1. Map showing the distribution of the specimens. The numeration indicates the locality of MACN-In from Table 1.

purchase from Est. Zool. Naples.

**Diagnosis** (amended from Clark & Clark, 1967): P2 is the same length as P3 and resembles it, though it does not bear a gonad; P1 is composed of more than 25 segments; there are no more than 18 cirrus segments of which the outer ones are moderately compressed laterally, the cirri rarely exceed 40 in number; the IB<sub>r</sub>1 are very short, especially in larger specimens, and the slightly converging lateral edges form distinct angles with the projecting lateral corners of the axillaries.

**Remarks.** We updated the name of the lot MACN-In 4300 that included specimens of the species *Antedon rosacea* (Pennat, 1777), subsequently identified as *Antedon bifida bifida* (Pennant, 1777). These specimens have a distribution from the Shetland and South Orkney Islands to northern Spain and most of Portugal (Clark & Clark, 1967), which also agrees with the distribution of the lot.

*Tropiometra carinata* (Lamarck, 1816)

**Studied material.** MACN-In 7868, 1 specimen, label: “San Pablo, Brasil” (San Pablo, Brazil).

**Diagnosis** (amended from Lamarck, 1816): 10 pinnate rays and 20 claws or dorsal cirri.

**Remarks.** In the case of *Tropiometra carinata* little is known of its patterns of distribution. Although Lamarck (1816) reported this species in France, other authors such as Tommasi (1965) and MarcCood & Duarte (2002) found *T. carinata* on the Brazilian coast. Besides, it was registered at Andaman and Nicobar Islands in the Indian

Sea (Nigam & Raghunathan, 2015). According to the diagnosis of this species, the characters agree with the accessioned sample (MACN-In 7868).

*Promachocrinus kerguelensis* (Carpenter, 1888)

**Studied material.** MACN-In 18707, 1 specimen, 23 m; MACN-18708, 6 specimens, 27 m, 1929, label: “Islas Georgias del Sur”, (South Georgia Islands); MACN-In 26984, 1 specimen, 1965, label: “Archipiélago Melchior” (Melchior Archipelago); MACN-In 27711, 6 specimens, 80 m, 1973 label: “Islas Georgias del Sur”, (South Georgia Islands).

**Diagnosis** (amended from Carpenter, 1888): P1 and P2 are similar, 20 mm in length. The first brachial ossicle is scarcely incised by the second. First radial ossicles barely visible; second ossicles short, nearly oblong, and but slightly joined laterally. Centrodorsal plate conical and thickly covered almost to the apex with 80 or more cirri that may reach 40 mm in length, and consist of 35 to 40 joints, which are mostly longer than wide. The later joints may slightly overlap, but the penultimate is small, with little or no trace of an opposing incised spine.

**Remarks.** Lots MACN-In 18707 and MACN-In 18708 were identified and studied by Irene Bernasconi (Bernasconi 1932, 1934). As far as we know, it is the only reference of a paper and she was the only one who identified these crinoid specimens at MACN.

*Crinometra brevipinna* (Pourtales, 1868)

**Studied material.** MACN-In 20514, 1 specimen, 1932, label: “Mar Caribe” (Caribbean Sea).

**Diagnosis** (amended from Pourtalès, 1868: 111): P1 longest, with about 12 joints. The other pinnules are very short, having only 5 or 6 joints in the middle of the arm, the last ones being tipped with a hook-like cirri. Ten arms with joints slightly imbricate. Approximately 15 cirri, with the same number of long articulations. The two radials are visible and have a smooth tubercle in the middle, as well as the axial and the two first brachials.

**Remarks.** *Crinometra brevipinna* (Portalès, 1868) is distributed from northern and eastern Gulf of México; coasts of Cuba to Barbados and Grenada, including Jamaica; Caribbean coast of central and South America and southward to the coast of Rio Grande do Sul, Brazil (Meyer *et al.*, 1978). This agrees with the distribution of the lot MACN-In 20514 previously identified as *C. brevipinna*, which was correctly labeled and checked here.

*Isometra vivipara* Mortensen, 1917

**Studied material.** MACN-In 22821: 54°50'S-64°01'W, 1 specimen, 151 m, 1935. MACN-In 22822: 54°57'S-64°42'W, 12 specimens, 265 m, 1935, labels: "Atlántico Sur" (South Atlantic). MACN-In 42367: 54°25'S-58°31'W, 27 specimens, 137 m. MACN-In 42368: 54°51'S-60°0'W, 25 specimens, 159 m. MACN-In 42369: 54°32'S-60°1.2'W, 3 specimens, 98 m depth. MACN-In 42370: 54°10'S-58°16'W, 2 specimens, 100 m. MACN-In 42371: 54°11'S-58°19'W, 1 specimen, 95 m. MACN-In 42372: 54°30'S-59°52'W, 8 specimens, 109 m. MACN-In 42373: 54°37'S-61°9'W, 4 specimens, 202 m. MACN-In 42374: 54°28'S-59°13'W, 4 specimens, 128 m. MACN-In 42375: 54°32'S-61°26'W, 20 specimens, 125 m. MACN-In 42376: 54°35'S-58°38'W, 1 specimen, 140 m. MACN-In 42377: 54°36'S-62°51'W, 3 specimens, 608 m. MACN-In 42378: 54°24'S-58°28'W, 8 specimens, 95 m, 2016, labels: "Area Marina Protegida Namuncurá/Banco Burdwood" (Burdwood Bank/MPA Namuncurá). MACN-In 42379: 55°6'S-65°44'W, 9 specimens, 263 m. MACN-In 42380: 54°52'S-64°16'W, 36 specimens, 151 m. MACN-In 42381: 54°39'S-63°49'W, 2 specimens, 143 m. MACN-In 42382: 54°24'S-62°49'W, 4 specimens, 483 m. MACN-In 42383: 54°26'S-58°32'W, 13 specimens, 138 m. MACN-In 42384: 54°26'S-59°30'W, 6 specimens, 91 m. MACN-In 42385: 53°40'S-61°38'W, 3 specimens, 642 m. MACN-In 42386: 53°34'S-63°58'W, 2 specimens, 263 m. MACN-In 42387: 53°34'S-62°58'W, 2 specimens, 516 m. MACN-In 42388: 53°49'S-61°28'W, 4 specimens, 209 m.

MACN-In 42389: 53°49'S-61°19'W, 8 specimens, 197 m. MACN-In 42390: 54°39'S-63°49'W, 2 specimens, 143 m, 2017, labels: Burdwood Bank/MPA Namuncurá.

**Diagnosis** (amended from Clark & Clark, 1967): P1 is up to 10.5 mm long with 10 to 17 segments, whereas P2 is usually 1.5 to 2.0 mm shorter with 9 to 14 segments and no longer than 8.5 mm.; P5 is usually the first genital pinnule, with 26-43 cirri, the longest segments hardly, if ever, longer than wide.

**Remarks.** The specimens MACN-In 28821 and MACN-In 28822 were studied by Bernasconi who largely contributed to subsequent studies. Also, Pertossi *et al.* (2019) studied the reproduction and developmental stages in the crinoid *I. vivipara*.

*Phrixometra nutrix* (Mortensen, 1918)

**Studied material.** MACN-In 39870: 38°51'S-55°35'W, 5 specimens, 145 m, 2009, MACN-In 43242: 38°51'S-55°34.58'W, 1 specimen, 140 m, 2009, MACN-In 43243: 38°51'S-55°34'W 7 specimens, 140 m, 2009, labels: "Talud continental" (Continental slope). MACN-In 43244: 61°49.6'S-57°34.4'W, 1 specimen, 210 m, 2011, label: "Antártida" (Antarctica). MACN-In 43245: 37°57.9'S-55°12.73'W, 1 specimen, 201 m, 2012, label: "Talud continental" (Continental slope). MACN-In 43246: 54°27'S-60°58'W, 1 specimen, 100 m, 2016, label: Burdwood Bank/MPA Namuncurá. MACN-In 43247: 53°49'S-61°28'W, 1 specimen, 209 m. MACN-In 43248: 54°36'S-61°30'W, 2 specimens, 294 m. MACN-In 43249: 54°51'S-63°52'W, 2 specimens, 330 m. MACN-In 43250: 55°5.5'S-60°41.9'W, 5 specimens, 122 m. MACN-In 43251: 54°48.79'S-63°45.91'W, 1 specimen, 278 m. MACN-In 43252: 59°26'S-59°30'W, 7 specimens, 91 m. MACN-In 43253: 54°5.2'S-60°53'W, 3 specimens, 132 m. MACN-In 43254: 53°31'S-63°1.8'W, 1 specimen, 512 m, 2017, labels: Burdwood Bank/MPA Namuncurá.

**Diagnosis** (amended from Clark & Clark, 1967): P1 has approximately 14 segments; P2 is usually the first genital pinnule and similar in length and number of segments to P1; the cirri of these crinoids are approximately 45, with less than 20 segments.

**Remarks.** *P. nutrix* is distributed in South America, from the Magallanes Region, in the Pacific Ocean, to the Namuncurá / Burdwood Bank Marine Protected Area, in the Atlantic Ocean, and Antarctica, from the Antarctic Peninsula and some Subantarctic Islands (Spell

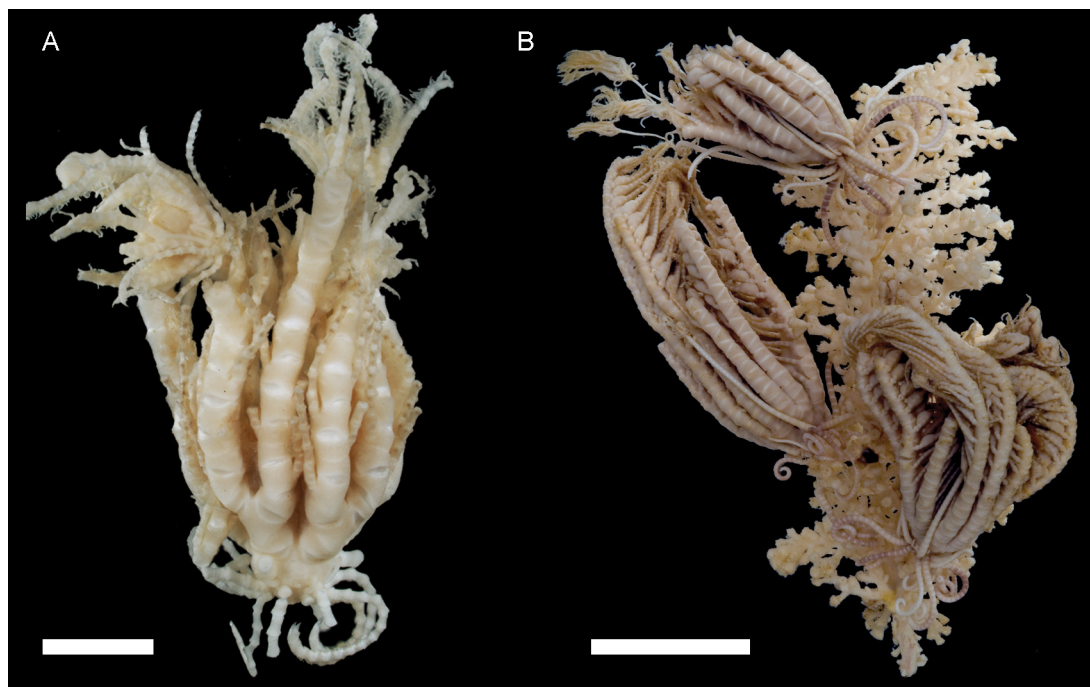


Fig. 2. Crinoids of Argentina. A, *Phrixometra nutrix*. B, *Isometra vivipara*. Scale bars: A 2 mm; B 2 cm.

& Dearborn, 1983). We increased their distribution near the Mar del Plata Submarine Canyon area (38°51'S-55°35'W, MACN-38970). Additionally, we updated the bathymetric range from 150 to 200m (Clark & Clark, 1967) to 512 m (Pertossi *et al.*, 2021).

*Isometra hordea* John, 1938

**Studied material.** MACN-42993: 63°23'S-57°00'W, 1 specimen, 260 m depth. Collected in "Bahía Esperanza, Antártida" (Hope Bay, Antarctica).

**Diagnosis** (amended from Clark & Clark, 1967): the cirri are 40-62 with 25-75 segments; the first two pinnules are relatively small, especially P1, which does not exceed 5mm in length; the first genital pinnule is usually P5; in the female, the third to seventh segments of the genital pinnules are usually expanded; this is a very large species with a length reaching up to 17 mm from the proximal edge of the IBr1 to the second syzygy at 9+10.

**Remarks.** We identified the specimen MACN-In 42993 as *Isometra hordea* John, 1938. The distribution of *I. hordea* is South Africa, South Shetlands, South Orkneys, and off Cape Adare in the Ross Sea. Here we report it in Hope Bay at 260m. All the characteristics observed resemble this species, like pinnule in position 2 (P2) being

longer than P1, the number of the cirri between 25-75, and up to 70 segments, the first genital pinnule is usually P5 (John, 1938; Clark & Clark, 1967; Spell & Dearborn, 1983) (Table 1)

#### DISCUSSION AND CONCLUSION

Echinoderms are well represented along the Argentine coast with more than 126 living species described, represented by 58 species of asteroids, 30 ophiuroids, 25 holothuroids, 12 echinoids, and 2 crinoids (Brogger *et al.*, 2013; O'Loughlin *et al.*, 2011; Martinez *et al.*, 2015). According to this, representatives of the only two known species of Crinoidea recorded in Argentina are deposited at MACN-In. By contrast, only 60% of the Asterozoa species recorded from Argentina are represented in the MACN-In, as well as, 65% of Ophiurozoa, 100% of Echinozoa, and 32% of Holothurozoa. Of the 56 lots of the studied crinoids, 70% of the specimens are from the Southwestern Atlantic Ocean and the Antarctica, while the others proceed from the Caribbean area, Mediterranean Sea, and Japan.

In Chile, Uruguay, and Brazil, the research of crinoids is limited. In Chile, the crinoid diversity is composed of five species of comatulids:

Table 1. Crinoids deposited at MACN-In. The name of each locality was kept according to the label.

MACN-In	Locality	Order	Family	Species	Specimens (N°)
899	1 Cuba, La Habana			NI	1
4300	2 Mar Mediterráneo	Comatulida	Antedonidae	<i>Antedon bifida bifida</i> (Pennant, 1777)	1
7863	3 Bahía Guanabara, Río de Janeiro			NI	2
7868	4 San Sebastián, San Pablo	Comatulida	Tropiometridae	<i>Tropiometra carinata</i> (Lamarck, 1816)	1
7948	5 Japón, Kyushic				2
18707	6 Georgias del Sur	Comatulida	Antedonidae	<i>Promachocrinus kerguelensis</i> Carpenter, 1888	5
18708	6 Georgias del Sur	Comatulida	Antedonidae	<i>Promachocrinus kerguelensis</i> Carpenter, 1888	1
20514	7 Caribe	Comatulida	Charitometridae	<i>Crinometra brevipinna</i> (Pourtales, 1867)	1
22821	8 Atlántico Sur	Comatulida	Antedonidae	<i>Isometra vivipara</i> Mortensen, 1917	7
22822	8 Atlántico Sur	Comatulida	Antedonidae	<i>Isometra vivipara</i> Mortensen, 1917	9
23664	9 Isla Santa Elena, África			NI	2
26984	10 Archipiélago Melchior	Comatulida	Antedonidae	<i>Promachocrinus kerguelensis</i> Carpenter, 1888	1
27711	11 Shetland del Sur	Comatulida	Antedonidae	<i>Promachocrinus kerguelensis</i> Carpenter, 1888	6
28210	12 Spirito Santo, Guapapari	Comatulida	Comatulidae	NI	2
31236	8 Atlántico Sur			NI	1
35320	6 Georgias del Sur			NI	4
35321	13 Isla Zavodovski			NI	2
35322	11 Shetland del Sur			NI	4
35323	11 Shetland del Sur			NI	1
35324	6 Sandwich del Sur			NI	1
35325	11 Shetland del Sur			NI	3
39870	14 Continental slope	Comatulida	Antedonidae	<i>Phrixometra nutrix</i> (Mortensen, 1918)	13
42367-42378	15 Burdwood Bank/MPA Namuncurá	Comatulida	Antedonidae	<i>Isometra vivipara</i> Mortensen, 1917	106
42379-42390	15 Burdwood Bank/MPA Namuncurá	Comatulida	Antedonidae	<i>Isometra vivipara</i> Mortensen, 1917	91
42993	16 Bahía Esperanza, Antártida	Comatulida	Antedonidae	<i>Isometra hordea</i> John, 1938	1
43242	11 Antártida	Comatulida	Antedonidae	<i>Phrixometra nutrix</i> (Mortensen, 1918)	1
43243	14 Continental slope	Comatulida	Antedonidae	<i>Phrixometra nutrix</i> (Mortensen, 1918)	1
43244	15 Burdwood Bank/MPA Namuncurá	Comatulida	Antedonidae	<i>Phrixometra nutrix</i> (Mortensen, 1918)	1
43245-43254	15 Burdwood Bank/MPA Namuncurá	Comatulida	Antedonidae	<i>Phrixometra nutrix</i> (Mortensen, 1918)	22

Table 2. Echinoderms registered in Argentina vs. echinoderms of Argentina deposited at MACN-In.

Class	Echinoderm species recorded in Argentina	MACN-In
Crinoidea	2	2 (100%)
Asteroidea	57	34 (60%)
Ophiuroidea	30	18 (60%)
Echinoidea	12	12 (100%)
Holothuroidea	25	8 (32%)

*Florometra magellanica* (Bell, 1882), *Isometra vivipara*, *Phrixometra nutrix*, *Promachocrinus kerguelensis*, and *Solanometra antarctica* (Carpenter, 1888) (Bohn, 2009; Catalán *et al.*, 2020). The eastern South Pacific Ocean shares two crinoids with the southwestern Atlantic Ocean, *I. vivipara* and *P. nutrix*. In the present contribution, no species of Crinoidea were registered of the 37 species of echinoderms reported from Uruguay (Martinez, 2013). According to Martinez (2013), there has been no systematic sampling of the Uruguayan waters, therefore the proportion among classes might not be reliable. Moreover, considering that research-oriented faunistic surveys have been scarce, except for recent years, and that the diversity of species in the collections has not been studied, it can be said that the number of species is not very clear (Martinez, 2013). In Brazilian waters, 16 crinoids species have been reported (Ventura *et al.*, 2013). Among them, specimens of *Tropiometra carinata* could be found deposited at the MACN-In collection under the number #7868 (Table 1). MacCord & Duarte (2002), described the dispersion pattern and size structure of the crinoid *T. carinata* along the southeastern Brazilian coast (MacCord & Duarte, 2002; Ventura *et al.*, 2013). Of the 44 crinoid species recorded in Antarctica (Eléaume *et al.*, 2014), the MACN-In collection houses specimens of only 4 species: *Isometra hordea*, *Isometra vivipara*, *Phrixometra nutrix*, and *Promachocrinus kerguelensis*.

In Argentina, research on the Phylum Echinodermata has been increasing in the last years (Brogger *et al.*, 2013; Martinez *et al.*, 2015), but crinoids are still one of the most enigmatic groups in the region. This inventory provides updated information on the Crinoidea collection deposited at the Museo Argentino de Ciencias Naturales “Bernardino Rivadavia”, Buenos Aires, Argentina, and constitutes a valuable tool for fu-

ture studies dealing with echinoderms and, particularly, those pertaining to the Class Crinoidea

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