

# FAUNA OF INDIA CHECKLIST

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## ARTHROPODA : PYCNOGONIDA

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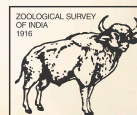
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**Key words:** Pantopoda, Sea spider, Proboscis

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**ZOOLOGICAL SURVEY OF INDIA**  
Ministry of Environment, Forest & Climate Change

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**Introduction:** Pycnogonids are commonly known sea spiders that belong to the Phylum Arthropoda. They are also known as Pantopoda because of their extremely reduced bodies, which have almost no abdomen and long, clawed legs. They feed on soft-bodied invertebrates, especially cnidarians, sucking at them with their proboscis, and larval pycnogonids frequently live as parasites within cnidarian tissues. They are thought to be close relatives of chelicerates due to claws on the first appendages and a tubercle with simple eyes, as well as the lack of antennae. However, pycnogonids differ from other arthropod animals in that they have a proboscis, a reduced abdomen, ovigers, gut diverticulae, and other characteristics that suggest they may be a separate group that diverged very early from the arthropods stem.

**Global diversity:** The class encompasses 1390 described species (both living and extinct) in 4 orders distributed globally.

**Diversity in India:** In India, 23 species belonging to 12 genera and 9 families are recorded.

**Diversity in States:** Presented in table 1.

**Table 1:** Pycnogonida of India, State-wise distribution

Sl. No.	State/UT	No. of Species
	<b>INDIA TOTAL</b>	<b>23</b>
1.	Andhra Pradesh	2
2.	Karnataka	1
3.	Kerala	6
4.	Odisha	1
5.	Tamil Nadu	11
6.	West Bengal	1
7.	Andaman & Nicobar	7
8.	Lakshadweep	2
9.	State Unknown	4

**Endemism:** No endemism has been recorded from India.

**Habitat:** They can only be found in estuarine and marine environments. Though they are most commonly found in intertidal region to reef-flats, lagoons, and live in the deep sea as deep as 7,000 metres (23,000 ft).

**Ecological Significance:** They have role in benthic food chain because of consuming soft bodied benthic animals. They also show major impact on hydroids, bryozoan colonies and predation and threat to corals, soft corals, and sea anemones.

**Human Significance:** Although no human significance has been reported thus far, these animals may be useful for indirect biomonitoring of coral reef or benthic environments.

**Threatened species:** No species of pycnogonid from India is assessed for IUCN threatened categories.

**Protected Species as per WPA:** Pycnogonida are not listed under any schedules of Indian Wildlife (Protection) Act, 1972.

**Species under CITES:** There is no species enlisted under the CITES Appendices.

**Invasive alien species:** No sea spider species is reported as invasive in Indian waters.

**Gap areas:** Even though India has long coastal region and major coral reef areas, less studies attempted on this group were made. Hence, they are considered as one of lesser known marine fauna of Indian waters. Very few studies have been attempted because of small size, cryptic species and difficulties in finding and collecting of sea spider specimens. More intensive studies are required to gain knowledge on taxonomy and ecology of sea spiders from Indian waters.

**Systematic list:** Species list cited below (Table 2).

**Table 2:** Pycnogonida of India

Sl. No.	Species
1.	<i>Nymphopsis acinacispinatus</i> Williams, 1933
2.	<i>Ascorhynchus ramipes</i> (Böhm, 1879)
3.	<i>Callipallene pectinata</i> (Calman, 1923)
4.	<i>Propallene kempi</i> (Calman, 1923)
5.	<i>Propallene hospitalis</i> Loman, 1908
6.	<i>Colossendeis colossea</i> Wilson, 1881
7.	<i>Colossendeis macerrima</i> Wilson, 1881
8.	<i>Rhopalorhynchus kroeyeri</i> Wood-Mason, 1873
9.	<i>Endeis flaccida</i> Calman, 1923
10.	<i>Endeis meridionalis</i> (Böhm, 1879)
11.	<i>Endeis mollis</i> (Carpenter, 1904)
12.	<i>Endeis ghaziei</i> Rajagopal, 1963
13.	<i>Nymphon andamanense</i> Calman, 1923

Sl. No.	Species
14.	<i>Nymphon longicaudatum</i> Carpenter, 1904
15.	<i>Bathypallenopsis annandalei</i> (Calman, 1923)
16.	<i>Pallenopsis hoeki</i> (Miers, 1884)
17.	<i>Pallenopsis ovalis</i> Loman, 1908
18.	<i>Anoplodactylus cribellatus</i> Calman, 1923
19.	<i>Anoplodactylus digitatus</i> (Böhm, 1879)
20.	<i>Anoplodactylus eroticus</i> Stock, 1968
21.	<i>Anoplodactylus petiolatus</i> (Krøyer, 1844)
22.	<i>Anoplodactylus sandromagni</i> Krapp, 1996
23.	<i>Pycnogonum indicum</i> Sundara Raj, 1930

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