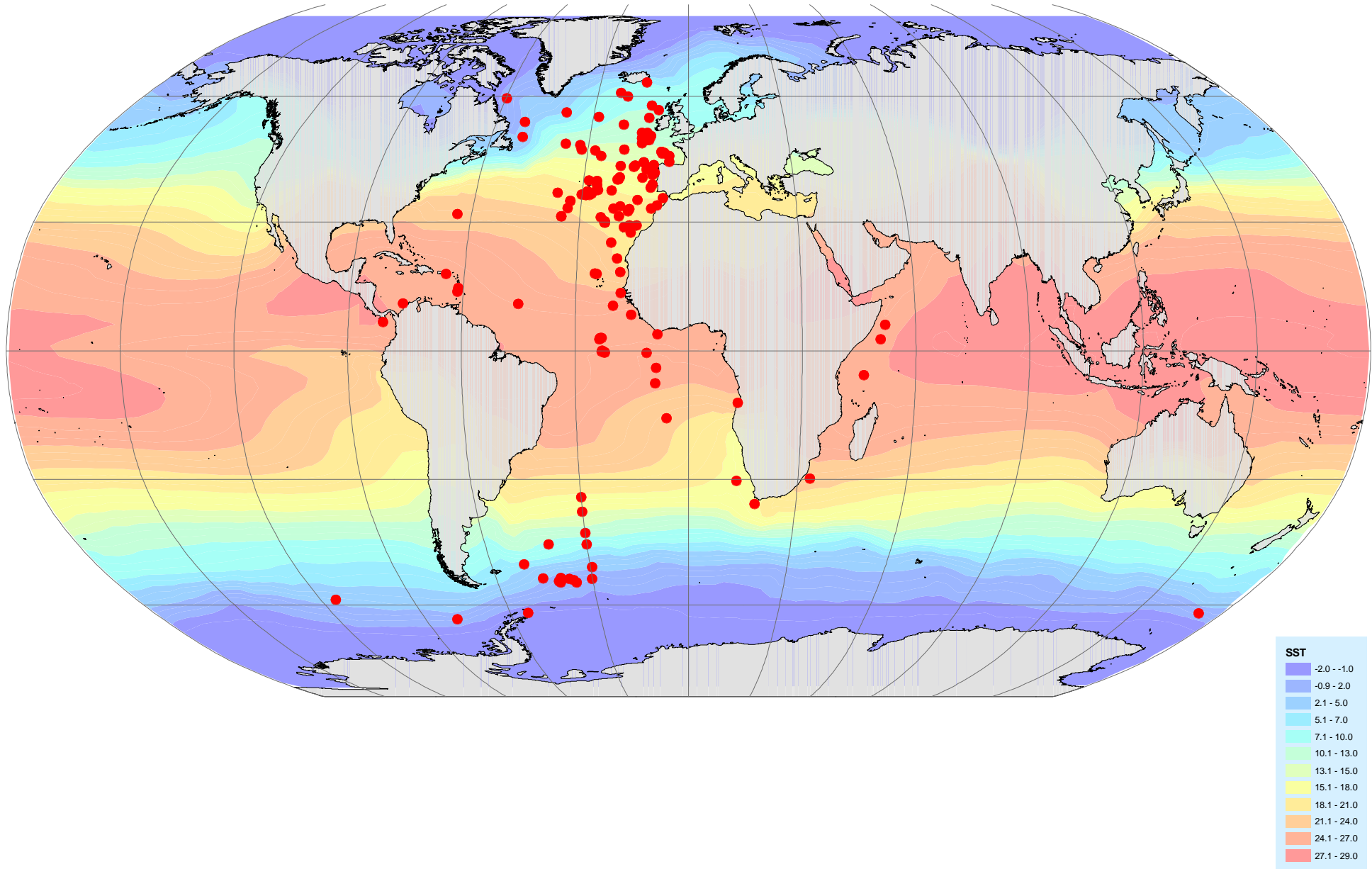
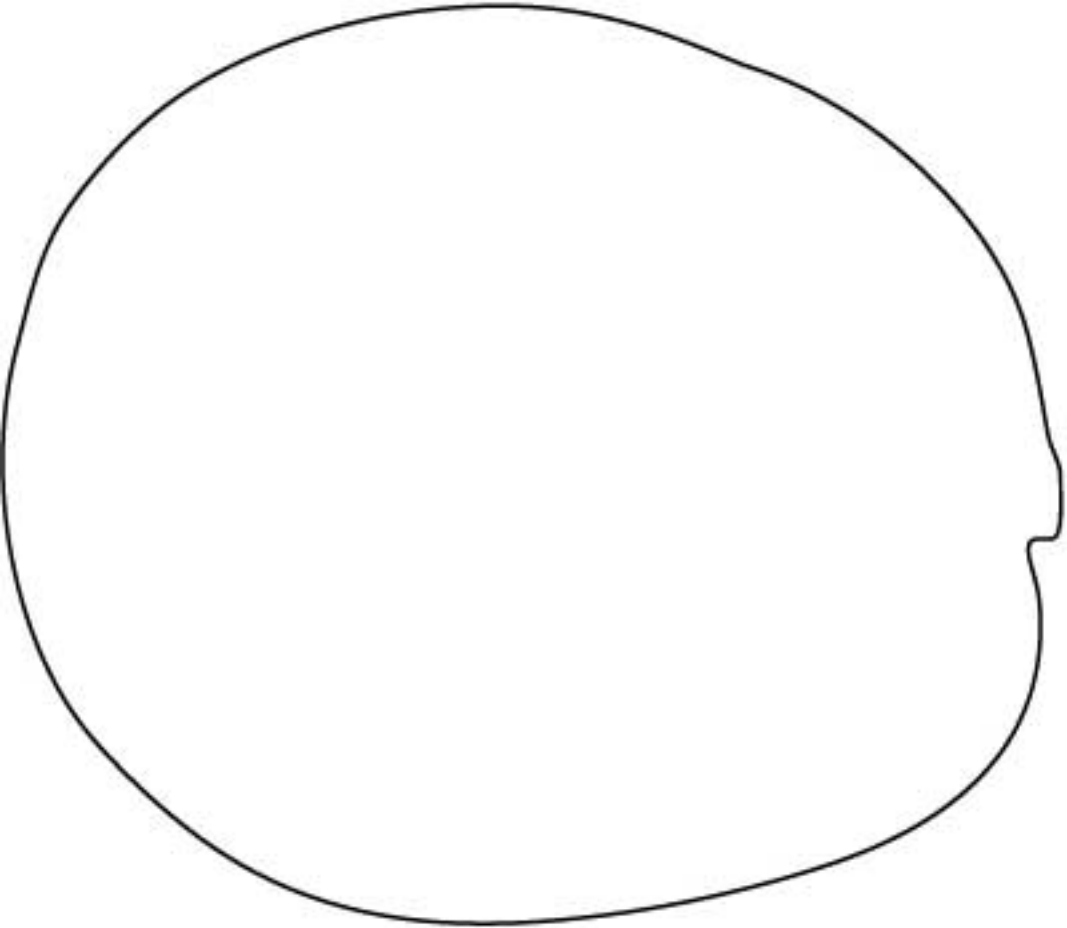


• *Gigantocypris muelleri*





5



*Gigantocypris muelleri* Skogsberg, 1920  
284 records

This large deep mesopelagic-bathypelagic myodocopid is reported to have a very widespread distribution in the Atlantic, but there are few records from other oceans. Poulsen (1962) recorded five *Gigantocypris* species, but only *G. dracontovalis*, a small abyssopelagic species has also been reported from the Atlantic. However, *Discovery* material from the Atlantic includes a few very large specimens about 30mm in length, a size consistent with *G. agassizi*. Skogsberg's original description is of Southern Ocean material and hence this is likely to be the type form. Tibbs (1965) reported that *G. muelleri* has an extensive range in the Southern Ocean based on *Eltanin* samples. However, he but did not publish any positional data nor have we been able to locate any records of Tibbs' data. It seems extraordinary that such a large and conspicuous species has been so poorly reported. The Southern Ocean forms are appreciably larger than Atlantic specimens, so it has to be left open whether the Atlantic specimens are indeed *G. muelleri*. Its reported range is 64°S to 63°N. But, it tends to be more abundant at higher latitudes. Its bathymetric range in the North Atlantic is 600-1500m, but there is some evidence for ontogenetic movements, since the shallower records are mainly juveniles and the deeper are adults. The live coloration of adults is predominantly orange-red, with the reflective naupliar eyes appearing silvery. The very large specimens that are probably a different, if not new species, were colourless. Specimens are very watery and are seldom collected undamaged. The species maintain neutral buoyancy by reducing the sulphate content of their haemolymph, and this is probably the functional reason for their wateriness. The length data does not include all the specimens collected, because this is a fragile species that is often damaged in samples. The measurements give below are based on good material collected using an insulated closing cod-end, which enabled specimens to be kept alive in a constant temperature conditions for several days.

60°N	n	Mean mm	s.d.	Range mm
Female	11	14.55	0.47	13.83-15.50
Male	17	12.27	0.76	11.33-14.00
A-1	7	13.18	1.34	9.33-12.50
A-2	6	11.00	0.41	7.17-8.17
A-3	3			6.25-6.67

52°N	n	Mean mm	s.d.	Range mm
Female	22	13.67	1.02	12.00-15.50
Male	27	11.79	0.90	10.00-13.50
A-1	17	10.48	0.76	9.67-12.00
A-2	3	9.03	0.10	8.92-9.17
A-3	15	7.38	0.41	6.67-8.08
A-4	8	5.95	0.41	5.33-6.42
A-5	6	4.25	0.33	3.83-4.83

44°-50°N	n	Mean mm	s.d.	Range mm
Female	58	14.15	0.49	12.8-15.1

Male	70	12.22	0.57	10.3-13.1
A-1	79	11.06	0.42	10.3-12.0
A-2	80	9.12	0.40	8.4-10.0
A-3	117	7.42	0.26	6.8-8.1
A-4	27	5.92	0.26	5.3-6.4
A-5	36	4.70	0.23	4.4-5.2

<b>Southern Ocean</b>	n	Mean mm	s.d.	Range mm
Female	26	17.29	0.91	15.5-18.7
Male	13	14.65	0.59	13.5-15.8
A-1	19	13.28	1.06	11.7-15.2
A-2	11	9.80	0.26	9.3-10.2
A-3	13	7.99	0.53	7.2-9.0
A-4	3			6.1-6.3
A-5	2			3.9-4.4