

GALATHEA.

CANCER. *Linn., Gmel.*

ASTACUS. *Johnst., De Geer, Pennant.*

GALATHEA. *Fabricii, Daldorf, Lamarck, Bosc, Latreille, Leach.*

Antennæ exteriores corpore longiores segmentis basilaribus tribus crassioribus, secundo haud longiore quam latiore;

Interiores pedunculo elongato infra oculos insertæ segmento ultimo acuto multiarticulato infra ciliato, setâ articulatâ ad basin.

Pedipalpi gemini externi 5-articulati, articulo primo interne haud dilatato.

Pedes decem; par anticum æquale, crassius, didactylum indice ad apicem saltem dentato; paria 2, 3, et 4 simplicia consimilia, subcompressa, unguibus acutis instructa; par quintum brevius spurium articulo ultimo inermi, ciliato.

Abdomen 6-articulatum.

Cauda pentaphylla; processibus medio fixo e segmentis composito, duobus externis simplicibus mobilibus.

GENERIS DIVISIONES.

- * *Rostrum acuminatum acutum utrinque 4-spinosum (spinâ posticâ minore). Pedes antici compressi. Abdomen segmentis lateraliter obtusis. Cauda lamella intermedia triangulari apice emarginato lacinii apice rotundatis.*
- a. *Antennæ interiores 4-articulatæ articulo primo apice unispinose, pedunculo apice bispinose. Pedipalpi gemini externi cauli interno articulo secundo primo longiore.*
- b. *Antennæ interiores 3-articulatæ, pedunculo trispinose. Pedipalpi gemini externi cauli interno articulo primo secundo longiore.*
- ** *Rostrum elongatum spiniforme basi utrinque bispinose (spinâ posticâ minore). Pedes antici subcylindrici. Abdomen segmentis lateraliter acutis. Cauda lamella intermedia transverso-quadrata apice subemarginatâ.*
(*Antennæ interiores triarticulatæ, pedunculò 3-spinosò. Pedipalpi gemini externi cauli interno articulo primo secundo longiore.*)

External antennæ longer than the body, with the three first segments thicker than the others, the second not longer than broad; internal antennæ with an elongate footstalk inserted beneath the eyes, their last joint acute composed of many segments, ciliated beneath, with an articulated seta at its base. External double feet-palpes five-jointed, the first joint not dilated internally. Legs ten; anterior pair didactyle, equal in size and thicker than the other legs; second, third, and fourth pairs simple, alike in form, somewhat compressed, with acute nails; fifth pair shorter, spurious, the last joint simple ciliated. Abdomen six jointed; tail composed of five foliaceous processes, the middle one of which is fixed and composed of several pieces, the outer ones being moveable.

DIVISIONS OF THE GENUS.

- * *Rostrum acuminate, sharp with four spines on each side (hinder spine smallest). Anterior legs depressed. Abdomen with the sides of the segments obtuse. Tail with the middle process triangular, the tip emarginate with the laciniae rounded.*
- a. *Internal antennae four-jointed, the first joint with its apex one-spined, the tip of the peduncle being two-spined. External double feet-palpes with the second joint of the internal stalks longer than the first.*
- b. *Internal antennae three-jointed, their peduncle with three spines. External double feet-palpes with the second joint of the internal stalks shorter than the first.*
- ** *Rostrum elongate spine-shaped with two spines on each side of its base (hinder spine smallest). Anterior legs somewhat cylindrical. Abdomen with the sides of the segments acute. Intermediate lamella of the tail transverse-quadrate, the tip slightly notched.*
(*Interior antennae three-jointed, peduncle with three spines. External double feet-palpes with the second joint of their internal stalk shorter than the first.*)

The Galathea inhabit deep water, and are for the most part found on rocky coasts. They move with very great rapidity, and when taken violently flap their breast with their abdomen.

Johnson has figured three species of this genus. (*Historia naturalis de exanguibus, tab. 2. fig. 3. 7. et tab. 4. fig. 11.*)

GALATHEA SQUAMIFERA.

TAB. XXVIII. A.

G. (* a) *Pedibus anticis granulato-squamosis, manibus externe, carpis brachiisque interne spinosis.*

Cancer astacus squamifer. Montagu MSS.

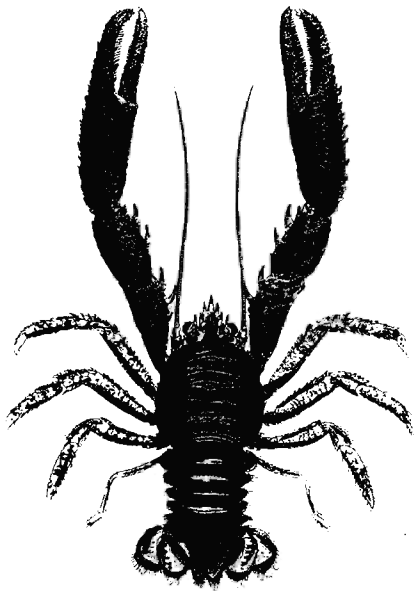
Galathea squamifera. Leach Edin. Encycl. 7. p. 398.

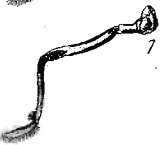
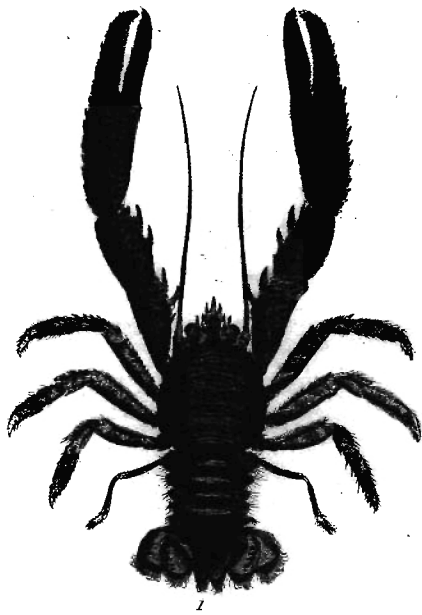
Fig. 1, Mas adultus. 2, Mas junior. 3, Pedipalpus geminus externus parvulum auctus. 4, Pedum tertii paris basis. 5, Feminae pars eadem coxae perforationem exhibens. 6, Maris pes posticus coxae perforata. 7, Pes posticus Feminae. 8, Abdominis segmenti secundi maris appendiculum.*

This elegant species of Galathea was discovered by Montagu on the Southern coast of Devon, where it occurs in very great abundance. Young specimens generally have a white line running down their back, and in this state they are frequently taken by the dredge in deep water.

It may be found under stones at low tide on all the rocky shores of Southern Devon from Plymouth to Torbay.

* Observavit J. Sowerby, junior.





GALATHEA SPINIGERA.

TAB. XXVIII. B.

G. (* b) Pedibus anticis subgranulato-squamosis supra et utrinque spinosis, brachiis externe inermibus.

Astacus strigosus *. *Penn. Brit. zool.* IV. 18. pl. 14.

Herbst tab. 26. fig. 2.

Galathea strigosa. *Fabr. Ent. Syst.* 2. 471. *Suppl.* p. 414.

Latr. Gen. Crust. et Ins. 1. 49.

Leach Edin. Encycl. 7. 398.

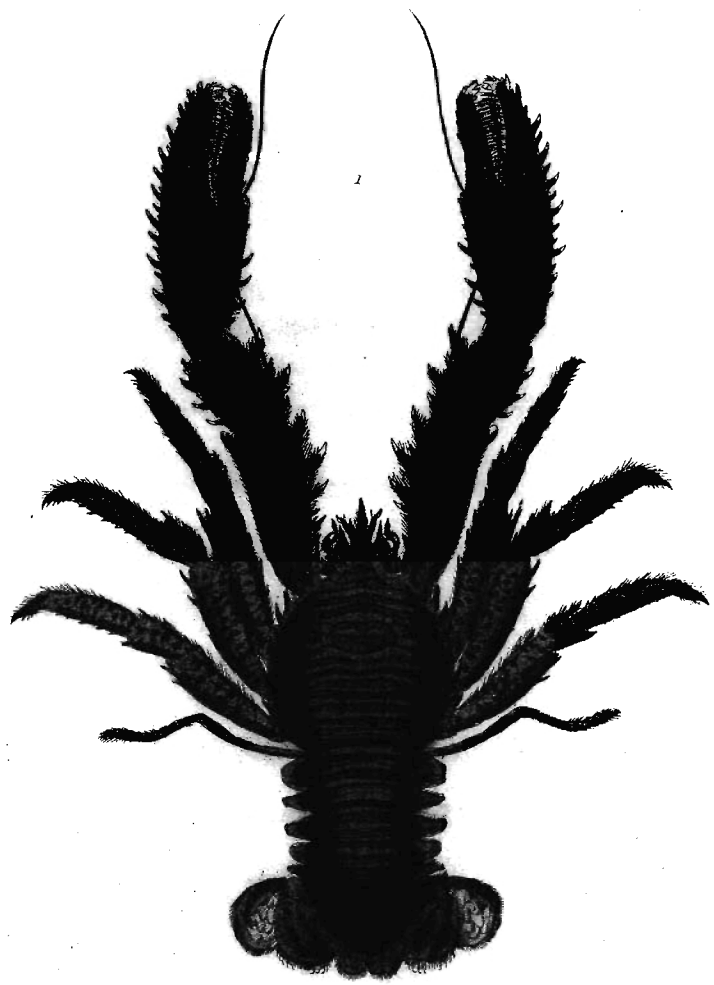
Fig. 1, Mas. 2, Ejusdem pullus.

Galathea strigosa is a common species on most of the rocky shores of Great Britain. It has been confounded by all the authors who have noticed it, with *Cancer strigosus* of Linné, but as it will not agree with the description given in the twelfth edition of the *Systema Naturæ* and in the *Fauna Suecica*, I have been under the necessity of changing the specific name.

Our figure is colored from a drawing most kindly sent to me by Mrs. Dorville, who drew it from a living specimen.

In the young state the legs are most elegantly annulated with red and white, as exhibited in figure 2.

* *Alia et distincta species est Cancer strigosus Linnæi ut hæc indicant verba.* "Thorax obovatus margine utrinque spinis octo acuminatis antorsum porrectis ciliatis, dorso rugis numerosis antorsum imbricatis. Chelæ oblongæ, depressæ, margine aculeatæ, supra scabræ, subtus quasi squamosæ; pedes apice rubri." *Fn. Sv. ed. alt.* 2036. "Brachia introrsum aculeata; chelæ oblongæ, margine aculeatæ, latere superiore antorsum imbricatæ scabritie ciliari." *Syst. nat.* XII. 1053.



GALATEA RUGOSA.

TAB. XXIX.

G. pedibus anticis introrsum præsertim spinosis; abdomine segmento secundo antice 6, tertio 4-spinosis.

Astacus Bamffius. Penn. Brit. Zool. IV. pl. 13.

Cancer rugosus. Gmel. Syst. Nat. 2985. 149.

Galatea rugosa. Fabr. Ent. Syst. 2. 472. Suppl. 415. 2.

Bosc Hist. nat. des Crust. 2. 87.

Latr. Hist. Nat. des Crust. et des Insect. 6. 198.

Galatea Longipeda. Lam. Syst. des Anim. sans Vert. 158.

Galatea Bamffia. Leach Edin. Encycl. 7. 398.

Fig. 1, mas. 2, antenna interna. 3, maris senioris manus, digitos curvatos exhibens.

Rondeletius seems to have been the earliest writer to whom this curious Galatea was known, and he has given an intelligible figure in his work "de piscibus," page 542.

Pennant next described it in his British Zoology, from a specimen taken near Bamff in Scotland, and communicated to him by the Rev. Mr. Cordiner.

It appears to be a very rare species in Britain, as it occurs in but very few collections. In the winter of 1814 my friend Mr. C. Prideaux of Kingsbridge, obtained a fine male and female from the Trawl-fishers, who found them in the Plymouth Sound. These specimens were communicated to me for this work, and the male is represented in the plate, together with one of the internal antennæ and a claw, showing the change that takes place in the form of this part in old specimens.

Herbst has copied Pennant's plate into table 27, fig. 3. of his work.

