ECSA POLYCHAETE WORKSHOP
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PHYLLODOCIDAE

ASYM/ECSA 90

The Phyllodocids include some very strikingly coloured representatives and the pigmentation patterns of some species are very characteristic. Many species, as among the Syllidae, are very attractive, but the identification of preserved specimens can be troublesome. The key to the British phyllodocids presented below is from a draft manuscript by Fredrik Pleijel (Swedish Museum of Natural History, Stockholm) and is reproduced here with his permission. The key together with illustrated descriptions of the British species is in press as part of the *Synopses of the British Fauna* series

1. Two or three pairs of tentacular cirri (2 or 1+2).....2
-- Four pairs of tentacular cirri (1+2+1).....10

2. Two pairs of tentacular cirri on segment 1. Dorsal cirri absent on segment 2.....3
-- One pair of tentacular cirri on segment 1 and two pairs on segment 2 (ventral pair may be very short). Dorsal cirri absent on segment 3.....8

3. Dorsal pair of tentacular cirri more than twice as long as ventral pair. Dark pigments forming three distinct longitudinal lines on dorsum.....*Eteone barbata*
-- Dorsal pair of tentacular cirri as long as ventral pair, or shorter.....4

4. Ventral cirri distinctly pointed.....*Eteone suecica*
-- Ventral cirri rounded.....5

5. Segment 2 without setigerous lobes or setae (a few setae may occur in smaller specimens), only with ventral cirri. Pygidial cirri long and pointed. Animals white.....*Eteone foliosa*
-- Segment 2 with setigerous lobes and a larger number of setae. Pygidial cirri rounded.....6

6. Proboscis with small, thorny, dorsally situated papillae. Rust-reddish pigment present on anterodorsal sides of cirrophores and as two lateral and two median dark areas dorsally on segments.....*Eteone picta*
-- Proboscis smooth or with rather indistinct papillae. Pigmentation (if present) otherwise.....7

7. Prostomium usually with convex sides. Ventral pair of tentacular cirri stouter and slightly longer than dorsal pair. Live animals rose-red to orange.....*Eteone flava*
-- Prostomium usually with concave sides. Dorsal and ventral pairs of tentacular cirri of similar size and shape. Live animals yellowish white.....*Eteone longa*

8. Setae present on segment 2. Ventral cirri of median segments situated proximally on setigerous lobe.....9
-- Setae absent from segment 2. Ventral cirri of median segments situated distally on setigerous lobe. Blade of setae broad and coarsely serrated.....*Hesionura elongata*

9. Antennae very thin, of uniform thickness. Median antenna absent. Tentacular cirri distinctly bottle-shaped. Eyes absent.....*Mystides caeca*
-- Antennae tapering. Small median antenna present. Tentacular cirri cylindrical. Eyes present.....*Pseudomystides limbata*

10. Four antennae.....11
-- Five antennae (median antenna may be very small).....24

11. Segment 1 and segment 2 fused.....12
-- Segment 1 may be reduced, but not fused to segment 2.....16

12. Segment 1 and 2 forming a collar covering posterior part of prostomium. Dorsal cirri oval. Ventral cirri horizontally orientated.....13
-- Segment 1 and segment 2 fused, but not forming a collar. Dorsal cirri cordiform. Ventral cirri obliquely orientated.....14

13. Prostomium with a nuchal papilla, situated in a deep distinct ligula .....*Paranaitis kosteriensis*
-- Ligula indistinct, papilla absent.....*Paranaitis wahlbergi*

14. Dorsal cirri much broader than long.....*Nereiphylla lutea*
-- Dorsal cirri as broad as long or longer.....15

15. Papillae of proboscis subapically hooked. Dorsum with two dark longitudinal lines.....*Nereiphylla rubiginosa*
-- Papillae of proboscis not hooked. Dorsal cirri dark with yellow edges.....*Nereiphylla paretti*

16. Eyes absent. All anterior segments dorsally visible. Dorsal cirri inflated, oval.....*Pseudoeulalia exigua*
-- Eyes present. At least segment 1 dorsally covered by posterior part of prostomium. Dorsal cirri flattened, usually sub-rectangular.....17

17. Ventral cirri of median segments slender, subulate, much longer than setigerous lobes. Proboscis with two kinds of papillae: six proximal rows of soft papillae on each side, and in front of these two lateral rows of hard tooth-shaped papillae. Live animals with two dorsolateral longitudinal red bands.....*Phyllodoce rosea*
-- Ventral cirri shorter and broader. Proboscis without hard papillae..18

18. Setigerous lobes strongly asymmetrical; conspicuous superior prolongation present. Dorsal cirri of median segments oval.....*Phyllodoce longipes*
-- Setigerous lobes, at most, only slightly asymmetrical.....19

19. Proximal part of proboscis with twelve longitudinal rows of papillae, six on each side.....20
-- Proximal part of proboscis otherwise.....22

20. Tip of ventral cirri of median segments pointing downwards. Proboscis with more than 11 papillae in each mid-lateral row. Dorsum of a metallic hue with dark transverse segmental bands.....*Phyllodoce groenlandica*
-- Tips of ventral cirri not directed downwards. Proboscis with no more than 10 papillae in each mid-lateral row. Dorsum with conspicuous spots mid-dorsally, laterally and on dorsal cirri, giving the animals a chequered appearance.....21

21. Ventral cirri pointed. Proboscis with 9-10 papillae in each mid-lateral row. Prostomium darkly pigmented anterior to eyes.....*Phyllodoce mucosa*
-- Ventral cirri rounded oval. Proboscis with 6-9 papillae in each mid-lateral row. Prostomium without conspicuous dark pigmentation anterior to eyes.....*Phyllodoce maculata*

22. Proximal part of proboscis with 25-30 rows of about 15 papillae arranged in more or less distinct rows. Dorsal tentacular cirri reaching at least segment 15.....*Phyllodoce lineata*
-- Proximal part of proboscis otherwise. Dorsal tentacular cirri reaching segment 14 at most.....23

23. Proximal part of proboscis with 8 more or less well-defined rows of 3-8 papillae. A broad dark longitudinal line on dorsum.....*Phyllodoce citrina*
-- Proximal part of proboscis densely covered with small diffusely distributed papillae. No dark longitudinal line on dorsum.....*Phyllodoce laminosa*

24. Parapodia biramous with a notopodial acicula. Large nuchal epaulettes present postero-lateral to prostomium.....*Notophyllum foliosum*

-- Parapodia uniramous. Nuchal organs (if visible) otherwise.....25

25. Segments 2-4 ventro-laterally with large stout setae.....*Chaetoparia nilssoni*

-- No stout protruding setae.....26

26. Segment 1 dorsally visible.....27
-- Segment 1 dorsally reduced, totally or in part.....33

27. Dorsal cirri lanceolate, pointed. Median pygidial papilla absent.....28
-- Dorsal cirri oval. Median pygidial papilla present.....30

28. Dorsal cirri asymmetrical. Live animals uniformly green, without special pigmentation pattern.....*Eulalia viridis*
-- Dorsal cirri more or less symmetrical. Animals with distinct pigmentation patterns.....29

29. Live animals yellowish with two red mid-dorsal lines and two darker dorso-lateral lines. Red lines disappear in alcohol, but lateral lines are retained.....*Eulalia aurea*
-- Animals yellowish, segmentally with two pairs of transverse dorsal olive-green bands and dark brown mid-dorsal spot.....*Eulalia ornata*

30. Median antenna minute, hardly visible (best seen in profile). Eyes small. Pygidial cirri with distinct tips.....*Eulalia mustela*
-- Median antenna larger. Eyes larger Pygidial cirri with rounded ends.....31

31. Animals with a dark, continuous mid-dorsal longitudinal line. Pygidial cirri oval, slightly flattened.....*Eulalia expusilla*
-- Pigmentation otherwise. Pygidial cirri cylindrical with rounded ends.....32

32. Animals with two dark dorso-lateral longitudinal bands.....*Eulalia bilineata*

-- Distinct dark spots on dorsum of every segment, one medial and two lateral.....*Eulalia tripunctata*

33. Median antenna inserted medially or posteriorly on prostomium. Prostomium and segment 1 well-delineated. Proboscis smooth or with rounded papillae.....34
-- Median antenna inserted anteriorly on prostomium. Prostomium and segment 1 fused. Proboscis densely covered with long thread-like papillae.....*Pterocirrus macroceros*

34. Segment 1 totally reduced. Setigerous lobes more or less symmetrical.....35
-- Segment 1 dorsally partly reduced. Setigerous lobes distinctly asymmetrical with a digitiform superior prolongation.....*Sige fusigera*

35. Proboscis densely covered with distinct rounded papillae. Setigerous lobes cleft. Dark spots present dorsally anterior to eyes and as transverse rows of about six on each segment.....*Pirakia punctifera*
-- Proboscis with small scattered papillae (often not visible). Setigerous lobes rounded. No spots in transverse rows on dorsum.....36

36. Dorsal cirri oblong, inflated, with rounded ends.....*Eumida minuta*
-- Dorsal cirri cordiform or triangular.....37

37. Ventral cirri pointed. Animals with green pigments.....38
-- Ventral cirri rounded. Dorsal cirri cordiform, longer than broad, without distinct tips. Colour variable, usually with brown pigments.....*Eumida sanguinea*

38. Dorsal cirri of adults cordiform, broader than long, with distinct tips. Pygidium without median papilla.....*Eumida bahusiensis*
-- Dorsal cirri triangular. Pygidium with a small median papilla. Small species.....*Eumida ockelmanni*

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