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# PHYLLODOCIDAE

E.B.W.S.A. ERRANT POLYCHAETE WORKSHOP

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Blenda  
O'Connor

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Key to the subfamilies of Phyllodocidae

- 2 or 3 pairs of tentacular cirri on the first or second segments  
..... Eteoninae
- 4 pairs of tentacular cirri on the first 3 segments  
..... Phyllodocinae

Key to the genera of Eteoninae

- 1. 2 pairs of tentacular cirri on segment 1  
..... 2  
3 pairs of tentacular cirri on segments 1 and 2  
..... 4
- 2. Segment 2 with chaetae ..... 3  
Segment 2 without chaetae ..... Hypereteone foliosa  
*4. lactea* - papillate - globs  
- juveniles w. chaetae  
- smooth proboscis
- 3. Proboscis with rows of papillae ..... Mysta  
Proboscis smooth ..... Eteone longa/flava  
- difficult character
- 4. 2nd tentacular - bearing segment with chaetae  
..... Mystides  
2nd tentacular - bearing segment without chaetae  
..... Hesionura elongata

Key to the species of Mysta

- Tentacular cirri long reaching 5th chaetiger.....M. barbata
- Tentacular cirri short reaching 2nd chaetiger.....M. picta

Key to the species of Mystides

- All tentacular cirri cylindrical; dorsal cirrus on third segment.....M. borealis
- Tentacular cirrus of second segment flattened and lanceolate; dorsal cirrus absent on third segment.....M. limbata

Key to the genera of Phyllodocinae

little flaps bying back from prostomium

1. Parapodia subbiramous; nuchal epaulettes present ..... Notophyllum foliosum  
 Parapodia uniramous; nuchal epaulettes absent ..... 2
2. 5 antennae ..... 3  
 4 antennae ..... 7
3. <sup>to be absent?</sup> ~~Ventral~~ cirri of second segment flattened and foliose ..... Pterocirrus  
 Ventral cirri digitate or subulate ..... 5  
 (fat tapering fingerlike)
4. ~~Chaetae first present from the second segment~~ ..... Pterocirrus  
 Chaetae first present from the third segment ..... Sige fusigera
5. Proboscis without papillae ..... Eumida sanguinea  
 Proboscis with papillae ..... 6
6. Tentacular cirri-bearing segments clearly separated from each other ..... Eulalia  
 First tentacular cirrus-bearing segment fused with the prostomium ..... Pirakia  
 (1st & 2nd cirrus & 1st seg. of proboscis on 1 line)
7. Chaetiger 1 and 2 with specialized chaetae ..... Chaetoparia nilsoni  
 Chaetiger 1 and 2 with normal chaetae ..... 8
8. Prosomium heart-shaped ..... 9  
 Prostomium rounded ..... 11  
 = quite clear
9. Ventral cirrus thrice as long as chaetal lobe with filiform tip. 5-7 large chitinous backward - pointing teeth on either side of proboscis just in front of proboscidal papillae ..... Dentanaitis subulifera  
 (unless 11 brd)  
 Ventral cirrus as long or slightly longer than chaetal lobes with rounded/pointed tip. No chitinous teeth on proboscis ..... 10



10. 2nd segment without chaetae; proboscidal papillae in rows on proximal portion of proboscis ..... Anaitides - papillae in lines  
 2nd segment with chaetae; proboscidal papillae minute and diffusely scattered over proximal portion of proboscis ..... Phyllodoce laminosa - papillae scattered
11. 2nd segment with chaetae ..... 12  
 2nd segment without chaetae ..... Paranaitis kosterensis
12. Tentacular cirri rounded in section ..... Genetyllis lutea  
 Tentacular cirri flattened in section ..... Nereiphylla paretii

### Key to Eulalia

1. Prostomium rounded; proboscis covered with papillae ..... 2  
 Prostomium heart-shaped; proboscis smooth ..... E. parva - main chaetae in type material
2. Longest tentacular cirri reach 12th chaetiger ..... E. viridis - the longest Dotted material  
 Longest tentacular cirri reach only to the 6th chaetiger or less ..... 3
3. Tentacular cirri as long as width of segment on which they occur ..... 4  
 Tentacular cirri much longer than width of segment on which they occur ..... 5
4. Prostomium rounded ..... E. pusilla  
 Prostomium piriform, longer than wide ..... E. bilineata
5. Dorsal cirri cordiform ..... E. splendens  
 Dorsal cirri laceolate or oval ..... 6
6. Prostomium conical ..... 7  
 Prostomium quadrangular ..... E. venusta
7. Ventral cirri lanceolate ..... E. trilineata  
 Ventral cirri oval ..... E. tripunctata

### Key to Pirakia

- Parapodial lobes rounded ..... P. fucesens draw   
 Parapodial lobes pointed ..... P. rubingosa/punctifera

Key to Anaitides

- 1. Proboscidal papillae as two groups of six rows on either side of proboscis ..... 2
- Proboscidal papillae not grouped but occur in lines all over proboscis ..... A. lineata



- 2. Parapodia with elongate tips ..... A. longipes
- Parapodia with blunt bilobed tips ..... 3



— Metacanthus of in ci. some piquantation. light brown and red. anterior parapodia virtually as ventral cirrus.

- 3. Ventral cirrus symmetrically ovate with an evenly rounded tip ..... A. maculata/mucosa
- Ventral cirrus asymmetrically ovate with a nipple-like tip ..... A. groenlandica



phyllodes

rather pointed of rounded



Provisionally

A. maculata: rounded ventral cirri. Unpigmented head.

A. mucosa: ventral cirri very pointed.

See Fred. from Sweden.

References to the Phyllodocidae

- Kravitz, M. J. and Jones, H.R. 1979. Systematics and ecology of benthic Phyllodocidae (Annelida: Polychaeta) off the Columbia River, U.S.A. Bull. South. Calif. Acad. Sci. 78: 1-19.
- Ushakov, P.V. 1972. Polychaetes Vol. I. Polychaetes of the suborder Phyllodociformia . Israel Program for Scientific Translations, Jerusalem 1974.
- Bergstrom, E. 1914. Zur systematik der Polychaeten - Familie Phyllodocidae. Zool. Bidr. Uppsala 3: 37-224.
- Banse, K. 1973. The ventral parapodial cirrus of the benthic Phyllodocidae (Polychaeta), with special reference to Clavadoce Hartman and Bergstroemia Banse. J. Nat. Hist. 7: 683-689.
- Hausmann, K. 1982. Elektronen mikroskopische Untersuchungen an Anatides mucosa (Annelida, Polychaeta). Cuticula and cilien. Helgoländ.Meeresunters.35:79-96.
- Laubier, L. 1972. Decouverte d'une annelide polychete de l'Atlantique boreal dans l'etage bathyal de Mediterranee Occidentale .Vie Milieu 23 (A) 255-261
- Olive, P. 1975. A vitellogenesis promoting influence of the prostomium in the polychaete Eulalia viridis (Müller) (Phyllodocidae). Gen. Comp. Endocrinology. 26: 266-273.
- Olive, P. 1975. The reproductive biology of Eulalia viridis (Müller) in the North Eastern U.K. J. mar. biol. Ass. U.K. 55: 313-326.
- Michel, C. 1964. Histologie, histochimie et innervation de la trompe d'Eulalia viridis (Müller) (Polychetes Errantes Phyllodocidae). Bull. Lab. mar. Dinard .Fasc. 49: 62-95.