

Cambrian chaetognaths recognized in Burgess Shale fossils

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Oesia disjuncta, one of the species of the soft-bodied fauna collected and described by Walcott (1911) from the Middle Cambrian Phyllopod Bed (Burgess Shale, British Columbia, Canada) is recognized as a chaetognath. For anatomical comparisons many specimens of Recent chaetognaths were specially compressed and dried to obtain forms similar to the fossils preserved in shales. The most characteristic features shared by the fossil and Recent specimens include: strongly elongated, transversely striated and very flexible body, large size, and characteristically diversified shape of head, pronounced intestine and horizontally oriented caudal fin. Possible traces of other chaetognath structures - grasping apparatus, lateral fins, seminal vesicles, ventral ganglion, ovaries and anus - are also present but preserved in one specimen only. Among extant genera, those showing the closest similarity to *Oesia* Walcott, 1911 are the hyperbenthic *Archeterokrohnia* Casanova, 19861, and *Heterokrohnia* Ritter-Záhony, 1911, which are considered by some authors as evolutionarily most primitive.

Key words: Chaetognatha, *Oesia*, soft-bodied fossils, protoconodonts, Cambrian, Burgess Shale, Canada.

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