## Mollusc Notes: the Resurrection of Acteocina oldroydi By Bill Merilees

As every shell collector knows only too well, the names or nomenclature of the specimens we seek is continuously in flux. Each 'scientific' name in current use often has had a number of synonyms applied to it previously. Looking to the future, the advent of new technologies, such as DNA sequencing, will bring even further changes, as our quest for a more perfect classification system progresses.

During the 1920's, the Pacific Biological Station, at Departure Bay in Nanaimo, was in its infancy but was well enough known that scientists from a wide range of biological disciplines were drawn to its facilities. From Stanford University, in California, Tom and Ida Oldroyd were frequent summer visitors. Both had strong interests in malacology, and in time were hired by Stanford as curators of what was then recognised as the second largest shell collection in the world!



**Fig. 1:** Illustration courtesy Jim McLean: A – Dall's 1925 holotype, *Acteocina oldroydi*, 8.5 mm, dredged at Departure Bay, Nanaimo, B.C. by Tom and Ida Oldroyd: B – *Acteocina oldroydi*, 6.8mm, dredged by the author from Cumshewa Inlet, Haida Gwaii: and C – *Acteocina harpa*, 5.5 mm, from Monterey, California

The Oldroyd's collecting efforts, around Nanaimo, resulted in the discovery of a number of new species. One of these was described, in 1925, by the eminent Smithsonian Malacologist, William H. Dall, as *Acteocina oldroydi*. This specimen was not illustrated but its description included the statement that, "the specimen has the entire surface decorticated (corroded), so that the surface characters cannot be definitely described." Not a ringing endorsement – and – without further corroborating material, over the next fifty-five years, the acceptance of this species lapsed.

In 1982, at the entrance to Cumshewa Inlet, Haida Gwaii, a dredge haul by the author in 12-13 fathoms of water yielded six *Acteocina* specimens that appeared to be different from *A. harpa*, a species more frequently encountered. Representative specimens were sent to Jim McLean, Curator of Molluscs at the Los Angeles County Museums (LACM) in 2008. Previous to this, Jim had decided, on the basis of his examination of Dall's type specimen, that *Acteocina* oldroydi should best be considered a synonym of *A. harpa* (McLean, pers. com.).

With the arrival of the Cumshewa specimens, Jim notified me that he was about to re-instate *Acteocina oldroydi* as a full species. He also sent me a copy of his proposed



illustration that included Dall's holotype, alongside my Cumshewa specimen and *Acteocina harpa*. (Fig. 1)

Sadly Jim passed away before the completion and publication of his magnum opus and therefore the formal scientific recognition of *A. oldroydi* never materialized. Recognition was accepted however, in 2019, with the publication of "Northeast Pacific benthic shelled sea slugs" by Angel Valdes. The World Register of Marine Species (WoRMS), then listed *Acteocina oldroydi* as a legitimate species.

In 2017, the author again located *Acteocina oldroydi* alongside *A. harpa* at Terrace Beach, Ucluelet, B.C. in the intertidal zone (**Fig. 2**). What is interesting about these *A. harpa* specimens is that, other than the protoconch, they have little or no spire, being very 'flat faced'. The spire height appears to be variable. The significance of this taxonomically, is unknown to the author. Further, Valdes', Figure 14G,

**Fig. 2:** Left - Acteocina harpa (2) 2.9 mm, and Right – Acteocina oldroydi, 5.5 mm. Merilees Collection 17-33-2, Intertidal, Terrace Beach, Ucluelet, B.C.

Fig. 3: Portion of Figure 14, Angel Valdes, Northeast Pacific benthic shelled sea slugs F. Acteocina harpa (Dall, 1871), 5 mm (LACM 1933-150.13), San Miguel Island, California (photo: Jenny McCarthy).
G. Acteocina harpa (Dall, 1871), 8 mm (LACM 157845), Forrester Island, Alaska (photo: Jenny McCarthy).
H. Acteocina oldroydi Dall, 1925, 6.8 mm (LACM 178962), Graham Island, British Columbia.



appears to be A. oldroydi rather than A. harpa as labeled. (Fig. 3) Perhaps the taxonomy within this genus still has another surprise, or two, in store for us?

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## References:

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