

Navicula directa (W.Sm.) Ralfs

in Pritchard, *History of the Infusoria, including the Desmidiaceae and Diatomaceae, British and Foreign* 906 (1861)

Pinnularia directa W.Sm., *Syn. Brit. Diatomaceae* 1: 56, pl. 18, fig. 172b (1853)

Type locality: Great Britain

Australian distribution: Qld, N.S.W., Vic., W.A. (Perth)

References: N.Foged, Diatoms in eastern Australia, *Biblioth. Phycol.* 41: 1–243 (1978)

J.John, The diatom flora of the Swan River Estuary, Western Australia, *Biblioth. Phycol.* 64: 1–358 (1983)

F.J.Scott & D.P.Thomas, Diatoms, *Antarctic Marine Protists* 13–201 (2005)

Extra-Australian distribution: Gulf of Mexico, U.S.A. (Washington, Florida, Virginia), Canada (Nova Scotia), Beaufort Sea, Iceland, Svalbard, British Isles, North Sea, Baltic Sea, Portugal, Spain, Romania, Mediterranean Sea (Turkey), Black Sea, Pakistan, Southern Ocean, East Antarctica, King George Island

Note: Marine and estuarine