

Biogeography and taxonomy of the Middle Jurassic zeillerid brachiopods *Eudesia* and *Sphriganaria*

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Mesozoic workers are generally of the opinion that the common European zeillerid brachiopod genus *Eudesia* King, 1850 also occurs along the southern Tethyan margin. Recent research in the Jurassic Ethiopian Province of Jordan, Israel and Saudi Arabia, however, indicates that Cooper's (1983) genus *Sphriganaria* has been misidentified over past decades as *Eudesia*. *Eudesia* is a strictly European taxon that, according to Muir-Wood (1965), has a cardinal process that is complicated in structure, hollow, with two small cavities, trilobed, prominent, and elevated above fused thickened hinge plates that are commonly pierced by 3 small cavities. *Sphriganaria* does not have a cardinal process but superficially resembles *Eudesia*. Similar genera include *Xenorina*, a eudesiid with a long, massive, bilobed cardinal process and *Apothyris*, with its distinctive ornamentation consisting of three generations of intercalation and eudesiid cardinalia similar to *Sphriganaria*. *Sphriganaria* is abundant in the Jurassic of Saudi Arabia (Dhurma Formation), Jordan (Mughanniya Formation) and Gebel El-Maghara, Sinai Peninsula, Egypt (Masajid Formation). However, it is rare in correlative strata in Israel (Hamakhtesh Hagadol, Makhtesh Ramon), Ethiopia and Somalia. *Eudesia* is confined to the Bathonian according to Muir-Wood (1965: 830) whereas *Sphriganaria* ranges from the Bajocian to the Kimmeridgian. After sectioning numerous specimens from the **Callovian (Middle Jurassic)** of Jordan we were able to reconstruct and illustrate the loop of *Sphriganaria* Cooper, 1983 for the first time.