

DEVONIAN PLANTS - *HAPLOSTIGMA* SEWARD - OF ARGENTINA AND BOLIVIA: NEW RECORDS, PALYNOASSEMBLAGES, AND AGES

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New samples of *Haplostigma* Seward were collected from southern Bolivia (two localities) and northern Argentina (two localities). The Argentinean material comes from the Pescado Formation at the Angosto del Pescado and the Los Monos Formation at Balapuca (by D.S. in 1990). It is comprised of fragmented stems as compressions and impressions; one of these shows a bifurcation (1.2 cm in width, 8 cm in length) with spiny lateral appendices. In southern Bolivia, fragmented and oxidized impressions and one cast of *Haplostigma* stems were recovered from the Iquiri Formation (collected by MdP in 2007) at Yesera Centro and Dique. The specimens are associated with scarce small brachiopods (undertemined rhynchonellid). Some poorly preserved stems were obtained from the Los Monos Formation at Mataral (by MdP in 2007). All the specimens are quite similar, being characterized by imprints of sub-herbaceous stems (1-1.3 cm in width, up to 8 cm in length) with surfaces covered by helically disposed scars with a strong vertical arrangement (8-9 rows, phyllotaxis angle up to 36°), and an oval-longitudinal to circular shape. Vascular traces were observed, and robust spine-like appendages are generally truncated. They resemble *Haplostigma irregularis* (Schwarz) Seward from the Middle to Late Devonian lower Witteberg Group (East Cape Fold Belt, South Africa), and *Haplostigma furquei* (Frenguelli) Gutiérrez from the Precordillera of Argentina. At Mataral, Angosto del Pescado and Balapuca the shales and siltstones interbedded with *Haplostigma* yielded mostly continental palynomorphs with *Grandispora pseudoreticulata* and other Eifelian (*i.e.* *Densosporites inaequus*, *Leiotriletes balapucensis*, *Verrucosisporites scurrus*) to Givetian species (*e.g.* *Geminospora lemurata*, *Archaeozonotriletes variabilis*, *Chomotriletes vedugensis*, *Verruciretusispora ornata*, *Chelinospora ligurata*, *Samarisporites triangulatus*), with fewer microplanktonic species (*i.e.* acritarchs, prasinophytes, chitinozoans). At Yesera Centro, the spores *Acinosporites eumammillatus*, *Auroraspora macra*, *Geminospora piliformis*, and the acritarchs *Maranhites insulatus*, *Ammonidium garrasinoi*, *Crucidia camirensis*, *Verhyachium pannuceum*, *Gorgonisphaeridium furcillatum*, *Gorgonisphaeridium ohioense* suggest a Givetian-Frasnian up to early Famennian age for the *Haplostigma* intervals. Samples from Yesera Dique were barren, yet the presence of the same invertebrate associated with *Haplostigma* allows for their correlation to Yesera Centro. [CONICET PIP 5518 (2005-2007), PIP 0305 (2011-2013)].