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The Middle Devonian is a pivotal period, marking a major transition from the early land plants that are now extinct to the structurally complex plants that gave rise to the major vascular plant groups of today. Our current understanding of the patterns and dynamics of this transition are mainly based on data from the paleocontinent Laurussia (Capel et al. 2022). When, at what rate, and how did this transition occur in Gondwana, the largest but least sampled paleocontinent for this time period? Our team is involved in a long-term project to document the taxonomic composition of Devonian plant assemblages from the northern edge of Gondwana and help answer this type of questions.

This talk focusses on the anatomically preserved euphyllophytes discovered at Oum El Jerane, a new Givetian (Middle Devonian) plant locality of Anti-Atlas in southeastern Morocco. The fossiliferous beds are marine and dated from the upper Givetian by the invertebrate fauna. The specimens consist of limonitized fragments of axes measuring 4-14 mm wide and up to 30 mm in length

One of the best preserved specimens is a last-order branch of *Arachnoxylon minor* (Iridopteridales). The Cladoxylopsida are represented by two specimens corresponding to relatively small plants, a branch referrable to cf. *Pseudosporochnus hueberi* and the proximal portion of a stem bearing roots assignable to a new genus. The aneurophytalean progymnosperms are represented by woody axes of *Triloboxylon* cf. *arnoldii* and a last order branch bearing paired appendages suspected to belong to a new species of *Triloboxylon*.

The generic composition of the Oum El Jerane assemblage is similar to that of the well-known assemblages from New York (Beck & Wight, 1988) indicating that floral exchanges occurred between northern Gondwana and Laurussia. Differences occur at the specific level. They suggest a certain level of provinciality of the Moroccan flora.

## References

Beck, C.B. & Wight, D.C, 1988. Progymnosperms. In *Origin and Evolution of gymnosperms*. C.B. Beck (Ed). Columbia University Press, New York, 1-84.

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