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Dielasma or Tunethyris? A Taxonomic Conundrum

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Tunethyris or *Dielasma*? a taxonomic conundrum

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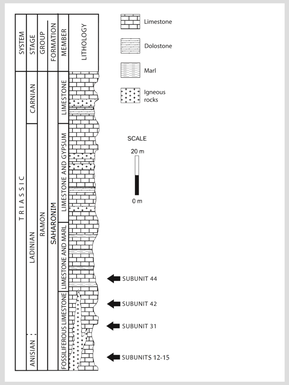
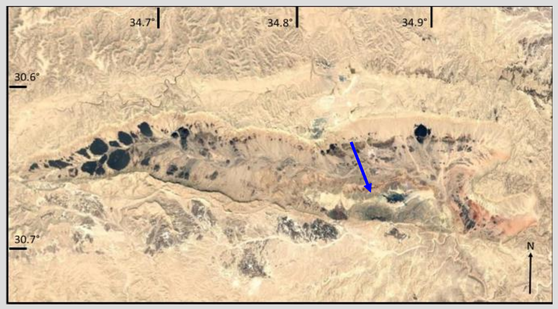
Introduction

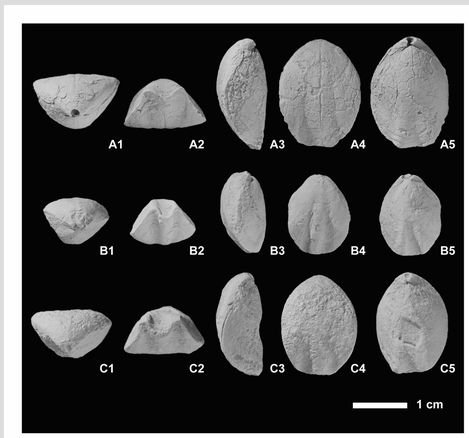
A new species of a dielasmid brachiopod from the Triassic Saharonim Formation of Makhtesh Ramon, southern Israel, was discovered in Anisian-Ladinian limestones that alternate with calcareous shales. The environment of deposition was an open shelf with normal salinity. The new species is homeomorphic with Paleozoic forms, but may not belong to the genus *Dielasma;* however, it may be a species of *Tunethyris*, a Triassic genus from Tunisia. If the Triassic specimens belong to the Paleozoic genus *Dielasma*, an important new Lazarus genus is added to the systematic literature. However, if the specimens belong to the Triassic *Tunethyris*, there are important paleobiogeographic considerations to be noted, such as the significance of the enigmatic Ladinian crisis and the influence of the Hispanic Corridor, an immature seaway connecting the western Tethys with eastern Panthalassa that may have been open sporadically during the Late Triassic and affected brachiopod distribution.

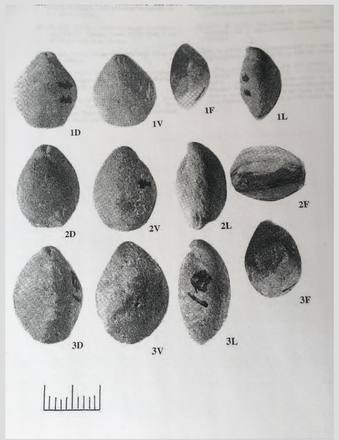


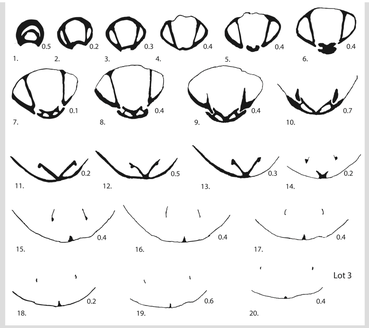


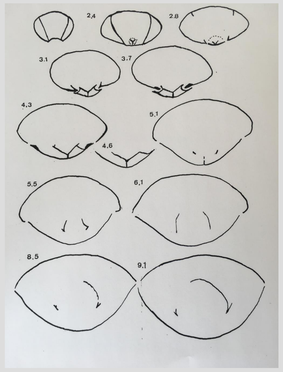
Top left, satellite view of eastern Mediterranean; circle denotes Makhtesh Ramon, Israel. Top right, stratigraphic column of southern Israel; bottom, arrow points to collecting locality.

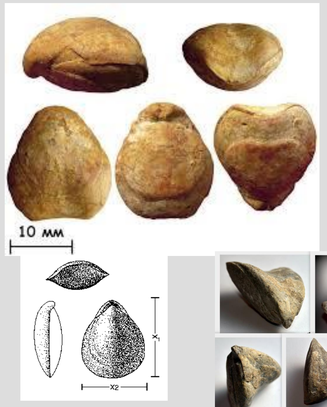
Tunethyris blodgetti n. sp. on left, *T. punica* on right. Serial sections of each are below.











Paleozoic dielasmids

Conclusions

Points favoring the selection of *Tunethyris* are:

1. **The orientation of the crura in the new species is slightly different from Paleozoic dielasmids, especially *D. elongatum* from the Permian of Germany.**

2. **The anatomy of *Tunethyris punica* from the Norian of Tunisia is very similar to the new species and the anterior commissure of both is sulicplicate, a feature not found in Paleozoic forms.**

3. **The loop of the Israeli brachiopods is acuminate. In addition to other anatomical characters that support the erection of a new species, *Tunethyris punica* has a septalium supported by a median septum whereas the septalium in the brachiopods from Makhtesh Ramon rests on the valve floor.**

Acknowledgements

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