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SUPPLEMENTARY ONLINE MATERIAL FOR

Rugose corals across the Devonian–Carboniferous boundary in NW Turkey

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Supplementary Online Material

Table 1: Coral genera recorded in the Uppermost Famennian (Strunian) in areas discussed in the main text (see Denayer 2016: fig. 9 for location). Data compiled from the references below. The term "endemic" is used for taxa occurring in one area; "widely distributed" is here used for taxa with occurrence in at least 3 areas (equivalent to the "linkages" sensu Webb 2000). Occurrences between brackets are not well stratigraphically constrained: Upper to Uppermost Famennian *P. costatus* Conodont Zone in Poland (Różkowska 1969); Upper Famennian lower *P. expansa* Conodont Zone in New Mexico (Sorauf 1992); *Wocklumeria* Ammonoid Zone in Morocco (Weyer 2002).

"Nervophyllum"	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
"Palaeosmilia"	1	-	1	-	1	-	1	-	-	-	-	-	-	-	-	-	-
<i>Siphonophyllia?</i>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1)
<i>Spirophyllum?</i>	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-
<i>Tabulophyllum</i>	1	1	-	1	1	-	1	1	-	-	-	-	-	-	-	-	-
undissepimented solitary corals																	
<i>Amplexocarinia</i>	-	-	1	-	1	1	-	-	-	-	-	(1)	-	-	-	-	-
<i>Beichuanophyllum</i>	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
<i>"Cyathaxonia"</i>	-	-	1	-	1	-	-	-	-	-	1	-	-	-	-	-	-
<i>Czarnockia</i>	-	-	(1)	-	-	-	-	-	-	-	(1)	-	-	-	-	-	-
<i>Euryphyllum</i>	-	-	(1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Famennelasma</i>	-	-	-	-	-	-	-	-	-	1	(1)	-	-	-	-	-	-
<i>Friedbergia</i>	-	-	(1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gen.indet.C	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gen.indet.D	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gen.indet.E	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Hillaxon=Circellia</i>	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
<i>Metriophyllum?='Fasciculophyllum'</i>	1	-	1	-	1	1	-	-	1	-	-	-	-	-	-	-	-
<i>Metrioplexus?</i>	-	-	(1)	-	-	-	-	-	-	-	1	-	-	-	-	-	-
<i>Nalivkinella</i>	-	-	(1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Neaxon</i>	-	-	(1)	1	-	-	-	-	1	1	-	-	-	-	-	-	-
<i>Pseudoclaviphyllum</i>	-	-	(1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Saleelasma?</i>	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
<i>Syringaxon</i>	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-
<i>Ufimia</i>	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-
total	7	8	15	9	14	5	8	6	5	6	0	5	3	5	1	1	0
widely distributed	5	3	7	5	6	3	5	2	3	3	2	0	0	0	0	1	0
endemic	1	3	3	3	2	0	2	2	0	0	0	1	1	1	0	6	
references	Poty (1986, 1999), Denayer et al. (2011) Berkowski (2002)	Różkowska (1969), Berkowski (2002) Berkowski (2002) Chwieduk (2005)	Denayer 2016	Poty & Onoprienko (1984); Poty (1984) Gorsky (1935, 1938) Weyer (1971, 1973, 1989); Korn & Weyer (2003) Semenoff-Tian- Chansky (1988) Weyer (2002) Poty & Xu (1996, 1997), Wu et al. (1981) Fan et al. (2003) Khoa (1996) Jell unpublished (after Berkowski, 2001) Papoian (1975, 1977) Soraf (1992)													

References:

- Berkowski, B. 2001. Famennian colonial Rugosa from southern Poland: recovery and extinction. *Bulletin of the Tohoku University Museum* 1: 285–290.
- Berkowski, B. 2002. Famennian Rugosa and Heterocorallia from Southern Poland. *Palaeontologia Polonica* 61: 1–87.
- Chwieduk, E. 2005. Late Devonian and Early Carboniferous Rugosa from Western Pomerania, Northern Poland. *Acta Geologica Polonica* 55 (4): 393–443.
- Denayer, J. 2016. Rugose corals across the Devonian-Carboniferous boundary in NW Turkey. *Acta Palaeontologica Polonica* 61: 51–70. <http://dx.doi.org/10.4202/app.00061.2014>**
- Denayer, J., Poty, E., and Aretz, M. 2011. Uppermost Devonian and Dinantian rugose corals from Southern Belgium and surrounding areas. In: M. Aretz and E. Poty (eds.), 11th International Symposium on Fossil Cnidaria and Porifera, Liege 2011, Field Guides. *Kölner Forum für Geologie und Palaöntologie* 20: 151–201.
- Fan, Y., Yu, X., He, Y., Pan, Y., Li, X., Wang, F., Tang, D., Chen, S., Zhao, P., and Liu, J. 2003. *The Late Palaeozoic Rugose Corals of Xizang (Tibet) and Adjacent Regions and Their Palaeobiogeography*. 679 pp. Hunan Science and Technology Press, Changsha.
- Gorsky, I. 1935. Some Coelenterata from the Lower Carboniferous beds of the Nowaya Zemlya [in Russian]. *Transactions of the Arctic Institute* 28: 6–122.
- Gorsky, I. 1938. Carboniferous corals from Novaya Zemlya [in Russian]. In: D.V. Nalivkin (ed.), *Paleontology of the Soviet Arctic, part II*, 1–221. Chief Administration of the Northern Sea route Arctic Institute of the USSR, Leningrad.
- Korn, D. and Weyer, D. 2003. High resolution stratigraphy of the Devonian-Carboniferous transitional beds in the Rhenish Mountains. *Fossil Records* 6 (1): 79–124.
- Papojan, A.S. 1975. On systematic position of *Cystophrentis* from the Lower Carboniferous of the south Transcaucasus (Armenia) [in Russian]. In: B.S. Sokolov (ed.), *Fossil Cnidaria*, 205–210. Akademiya Nauk, Novosibirsk

- Papojan, A.S. 1977. The coral complexes of Early Carboniferous in the Southern Transcaucasus and its relation with some biogeographical provinces. Mémoire du Bureau de Recherches Géologiques et Minières (BRGM) 1977: 197–202.
- Poty, E. 1984. Rugose corals at the Devonian-Carboniferous boundary. *Courier Forschungsinstitut Senckenberg* 67: 29–35.
- Poty, E. 1986. Late Devonian to Early Tournaisian Rugose Corals. *Annales de la Société géologique de Belgique* 109: 65–74.
- Poty, E. 1999. Famennian and Tournaisian recoveries of shallow water Rugosa following late Frasnian and late Strunian major crises, southern Belgium and surrounding areas, Hunan (South China) and the Omolon region (NE Siberia). *Palaeogeography, Palaeoclimatology, Palaeoecology* 154: 11–26.
- Poty, E. and Onoprienko, Y. 1984. Rugose corals. In: N.A. Shilo, J. Bouckaert, M.J.M. Afanasieva, M.J.M. Bless, R. Conil, O.A. Erlanger, M.H. Gagiev, S.S. Lazarev, Y. Onoprienko, E. Poty, T.P. Razina, K.V. Simakov, L.V. Smirnova, M. Strel, and R. Swennen (eds.), Sedimentological and Palaeontological atlas of the Late Famennian and Tournaisian deposits in the Omolon Region (NE USSR). *Annales de la Société géologique de Belgique* 107: 200–213.
- Poty, E. and Xu, S. 1996. Rugosa from the Devonian-Carboniferous transition in Hunan, China. *Mémoires de l'Institut de Géologie de l'Université de Louvain* 36: 89–139.
- Poty, E. and Xu, S. 1997. Systematic position of some Strunian and Lower Carboniferous heterocoral-like colonial corals. *Boletín de la Real Sociedad Española de Historia Natural. Sección Geológica* 91 (1–4): 99–106.
- Róžkowska, M. 1969. Famennian Tetracorallloid and Heterocorallloid fauna from the Holy Cross Mountains (Poland). *Acta Palaeontologica Polonica* 24 (1): 1–187.
- Semenoff-Tian-Chansky, P. 1988. Corals from the Devonian-Carboniferous Boundary at La Serre (Montagne Noire, France). *Courier Forschungsinstitut Seckenberg* 100: 129–138.
- Sorauf, J.E. 1992. Late Devonian (Famennian) rugose coral fauna of the Percha Shale of Southwestern New Mexico. *Journal of Paleontology* 66: 730–749.
- Webb, G.E. 2000. The Palaeobiogeography of Eastern Australian Lower Carboniferous Corals. *Historical Biology* 15: 91–119.

- Weyer, D. 1971. *Neaxon regulus* (Rh. Richter, 1848), ein Leitfossil des mitteleuropäischen Wocklumeria-Stufe (Anthozoa, Rugosa, Oberdevon). *Geologie* 20: 292–315.
- Weyer, D. 1973. *Famennelasma* gen. nov. (Anthozoa, Rugosa) aus der Cephalopoden-Fazies des mitteleuropäischen Oberdevons. *Paläontologischen Abhandlungen* 4: 683–693.
- Weyer, D. 1989. *Neaxon muensteri*, eine neue Koralle aus dem europäischen Oberfamenne. *Abhandlungen und Berichte für Naturkunde und Vorgeschichte* 14: 3–16.
- Weyer, D. 2002. Famennium-Anthozoa aus Marokko, 1, *Czarnockia Róžkowska*, 1969 (Rugosa). *Fossil Records* 5 (1): 75–92.
- Wu, W., Zhao, J., and Jiang, S. 1981. Corals from the Shaodong Formation (Etroeungt) of South China. *Acta Palaeontologica Sinica* 20 (1): 1–14.