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Part R, Revised, Volume 1, Chapter 80:
Systematic Descriptions:
Section Torynommoida

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PART R, REVISED, VOLUME 1, CHAPTER 80: SYSTEMATIC DESCRIPTIONS: SECTION TORYNOMMOIDA

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Section TORYNOMMOIDA Karasawa, Schweitzer, & Feldmann, 2011

[*Torynommoida* KARASAWA, SCHWEITZER, & FELDMANN, 2011, p. 548]

Description as for family. *Lower Cretaceous (Aptian)–Upper Cretaceous (Maastrichtian)*.

Superfamily TORYNOMMOIDEA Glaessner, 1980

[*nom. transl.* KARASAWA, SCHWEITZER, & FELDMANN, 2011, p. 548, *pro* *Torynommidae* GLAESSNER, 1980, p. 180]

Description as for family. *Lower Cretaceous (Aptian)–Upper Cretaceous (Maastrichtian)*.

Family TORYNOMMIDAE Glaessner, 1980

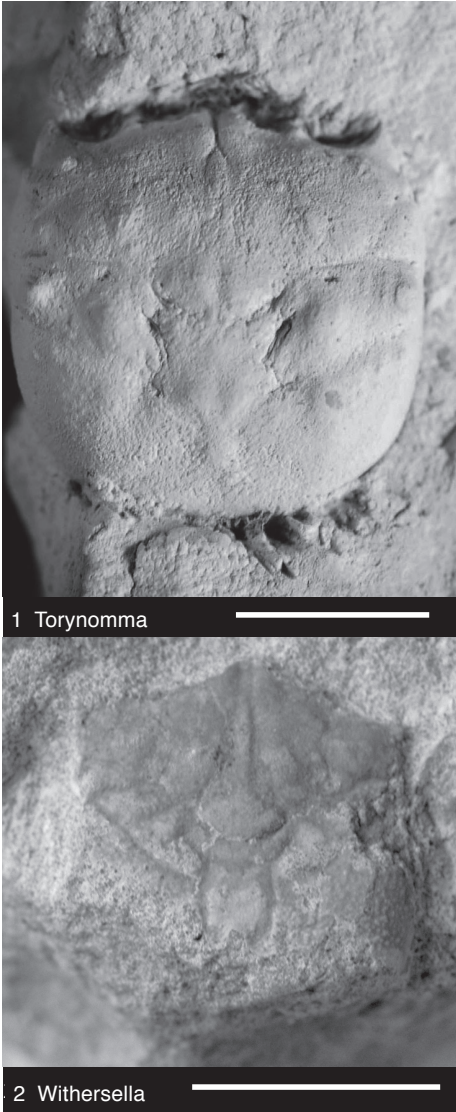
[*Torynommidae* GLAESSNER, 1980, p. 180]

Carapace quadrate; front narrow; orbits extremely broad, forward-directed, with short intraorbital spine and stout, forward-directed, outer-orbital spine; orbits and frontal margin of carapace nearly straight; cervical groove with hepatic groove extending from it anteriorly and intersecting lateral margin; branchiocardiac groove subparallel to cervical groove and hepatic segment; branchiocardiac groove extending onto flank in long, oblique path; cervical groove weakly extending onto flank and appearing to nearly intersect branchiocardiac groove; hepatic groove appearing to extend onto flank; third maxilliped without crista dentata; anterior sternite 4 broad, with transverse ridge at which female pleon terminates, sternopleonal

depression present, well developed sternal sutures 4/5, 5/6, and 6/7; pleonites of female wide, with moderately developed epimeres; telson much wider than long, terminating before coxae of first pereopods (KARASAWA & others, 2011, p. 548). *Lower Cretaceous (Aptian)–Upper Cretaceous (Maastrichtian)*.

Torynomma WOODS, 1953, p. 54 [**T. quadrata*, p. 54, pl. 2, 6–7; OD]. Carapace quadrate; front narrow; orbits extremely broad, forward directed, with short intraorbital spine and stout, forward-directed outer-orbital spine; orbits and frontal margin of carapace nearly straight; cervical groove with hepatic groove extending anteriorly and intersecting lateral margin, branchiocardiac groove subparallel to cervical groove and hepatic segment; branchiocardiac groove extending onto flank in long, oblique path; cervical groove weakly extending onto flank and appearing to nearly intersect branchiocardiac groove; hepatic groove appearing to extend onto flank; anterior sternite, probably 4, broad, with long episternal projections, with transverse ridge at which female abdomen terminates; abdominal somites of female wide, with moderately developed epimeres; telson much wider than long, terminating before coxae of first pereopods (adapted from SCHWEITZER & FELDMANN, 2011, p. 250). *Lower Cretaceous (Albian)–Upper Cretaceous (Maastrichtian)*: Australia (Queensland), *Albian*; Australia (Northern Territory), *Cenomanian–Turonian*; New Zealand, *Maastrichtian*.—FIG. 1, I. **T. quadrata*, holotype, QMF 2877b, Albian, Queensland, scale bar, 1 cm (Schweitzer & Feldmann, 2011, fig. 6.1).

Withersella WRIGHT & COLLINS, 1972, p. 91 [**W. crepitans*, p. 91, pl. 19, 4–5; OD]. Carapace tiny, quadrate, transversely and longitudinally flattened; length and width about equal; rostrum axially sulcate, bilobed, margins upturned, node along midlength of margins; orbits appear to have a fissure, outer-orbital spine very long, directed forward and upward; fronto-orbital width 85% of maximum carapace width; mesogastric region long;

1 *Torynomma*2 *Withersella*

anterior process very long, narrow, terminates at base of rostrum; hepatic and protogastric regions weakly distinguished; metagastric region well defined by cervical and postcervical grooves; cardiac region with three nodes; epibranchial region extending onto flanks, dorsally separated into three parts by transverse grooves; remainder of branchial region weakly inflated, pustulose; cervical groove sinuous, deepest around base of mesogastric region; post-cervical groove deep, continuous; branchiocardiac groove deep (adapted from SCHWEITZER & FELDMANN, 2011, p. 251). *Lower Cretaceous (Aptian):* UK (England).—FIG. 1,2. **W. crepitans*, holotype, BM In.60950, scale bar, 5 mm (new).

ABBREVIATIONS FOR MUSEUM REPOSITORIES

BM: The Natural History Museum, London, UK
QMF: Queensland Museum, Queensland, Australia

REFERENCES

- Glaessner, M. F. 1980. New Cretaceous and Tertiary crabs (Crustacea: Brachyura) from Australia and New Zealand. *Transactions of the Royal Society of South Australia* 104:171–192.
- Karasawa, Hiroaki, C. E. Schweitzer, & R. M. Feldmann. 2011. Phylogenetic analysis and revised classification of podotrematous Brachyura (Decapoda) including extinct and extant families. *Journal of Crustacean Biology* 31:523–565.
- Schweitzer, C. E., & R. M. Feldmann. 2011. Revision of some fossil podotrematous Brachyura (Homolodromiidae; Longodromitidae; Torynommiidae). *Neues Jahrbuch für Geologie und Paläontologie*, 260: 237–256.
- Woods, J. T. 1953. Brachyura from the Cretaceous of central Queensland. *Memoirs of the Queensland Museum* 13:50–57.
- Wright, C. W., & J. S. H. Collins. 1972. British Cretaceous crabs. *Palaeontographical Society Monographs* 126(533):1–113.

FIG. 1. *Torynommiidae* (p. 1–2)