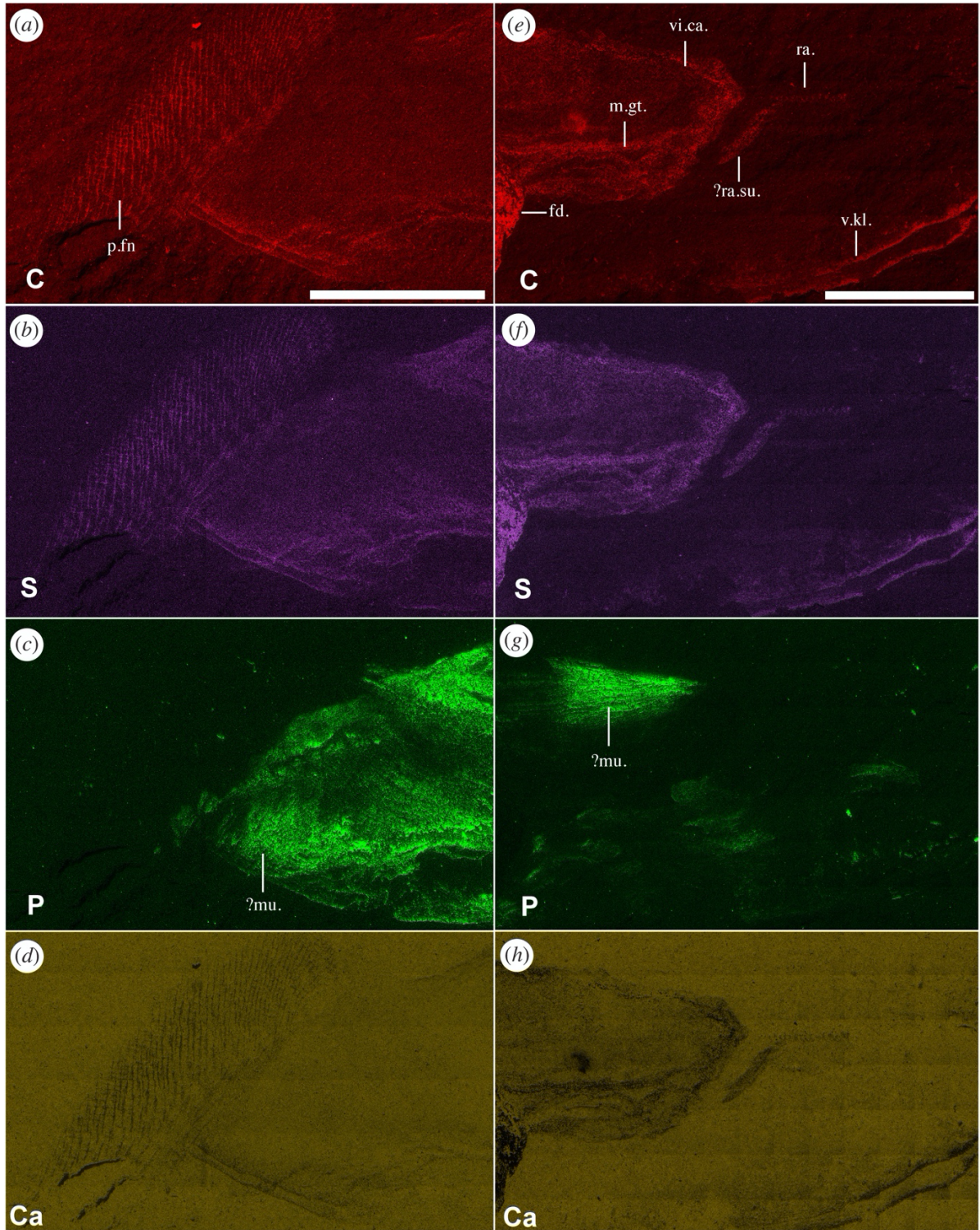


Supplementary Information

A possible home for a bizarre Carboniferous animal: Is *Typhloesus* a pelagic gastropod?

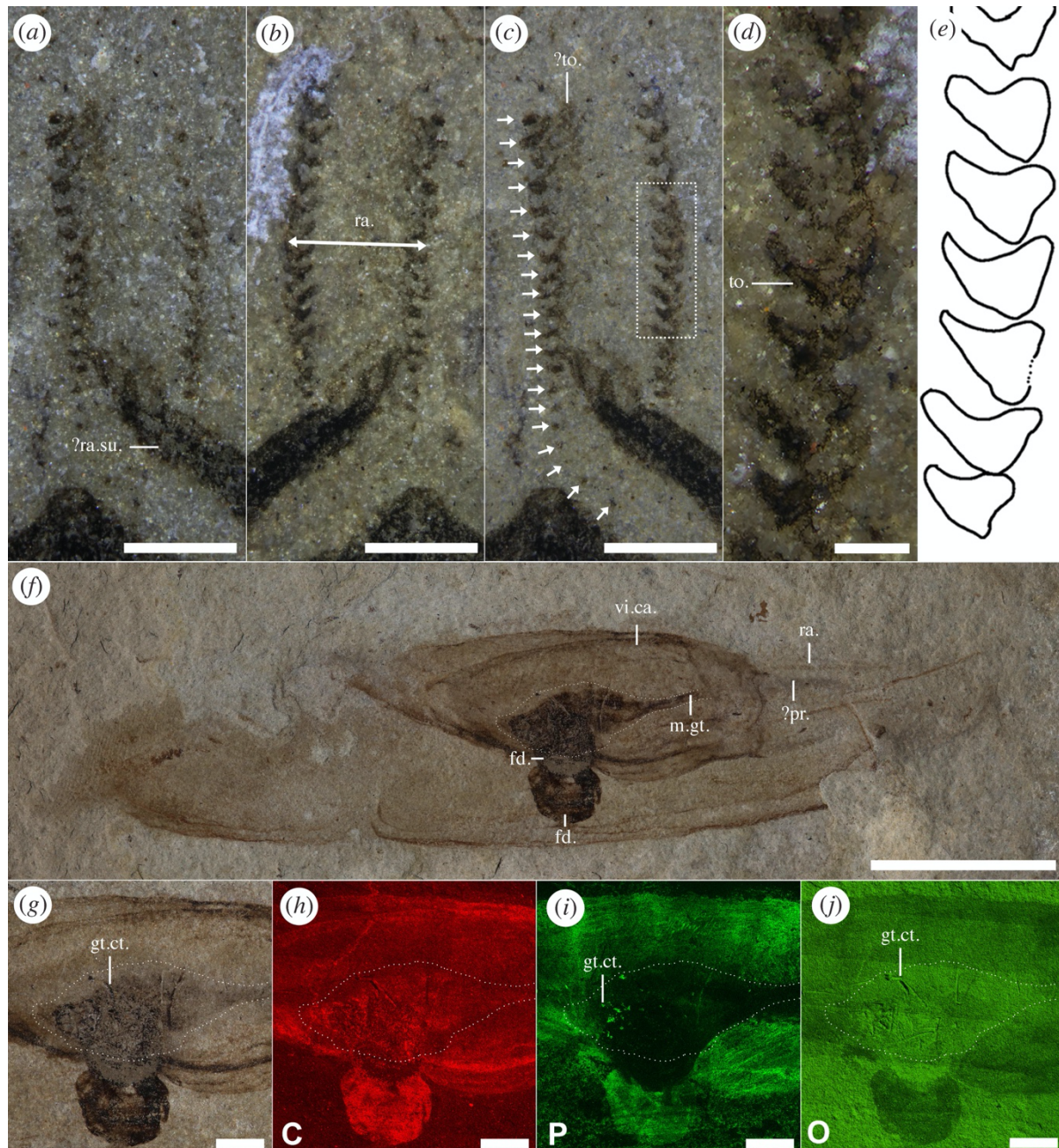
Simon Conway Morris and Jean-Bernard Caron



Supplementary Figure 1. *Typhloesus wellsi* – elemental maps of ROMIP 48528 (part). (*a-d*), posterior section; (*e-h*), mid-anterior section. (*a, b*), enrichment in Carbon (*a*) and Sulfur (*b*) of the tail fin and epidermal(?) tissues; (*c*), enrichment in Phosphorus of internal, possibly muscle tissues(?); (*d*) Calcium map showing no enrichment across any parts of the body. (*e, f*), enrichment in Carbon (*a*) and Sulfur (*b*) of the radula and associated structures, midgut, ferrodiscus, and ventral keel; (*g*), enrichment in Phosphorus of possible muscle

tissues; (*h*) Calcium map showing no enrichment across any parts of the body.

Abbreviations: see figure 1. Scale bars = 5 mm.



Supplementary Figure 2. *Typhloesus wellsi* – radula and gut. (a-e), radula, anterior to the top, ROMIP 48528: (a), part; (b), counterpart; (c), merged part and counterpart images, showing at least 20 teeth in the left row (white arrows) and indeterminate tooth-like structures towards the front (?to.); (d-e), close-up of radula and line drawing. (f-j), ROMIP 48526: (f), merged part and counterpart images; (g-j), detail of mid body showing gut contents, images of the part flipped vertically; (h-j) elemental maps of Carbon (h), Phosphorus (i) and Oxygen (j). Abbreviations: gut content (gt. ct.); others see Figure 1. Scale bars = 10 mm (f); 2 mm (g-j); 1 mm (a-c); 0.15 mm (d-e).