

Three new species of non-marine ostracods from northern China

Na Yu¹, Shunxin Ma^{1,2}, Qianwei Wang^{3,4}, Dayou Zhai^{3,4,*}

¹ College of Teacher Education, East China Normal University, Shanghai, China ² Fengxian High School, Shanghai, China

³ Yunnan Key Laboratory for Palaeobiology, Institute of Palaeontology, Yunnan University, Kunming 650500, China

⁴ MEC International Joint Laboratory for Palaeobiology and Palaeoenvironment, Yunnan University, Kunming 650500, China

*Corresponding author: Dayou Zhai (dyzhai@ynu.edu.cn)

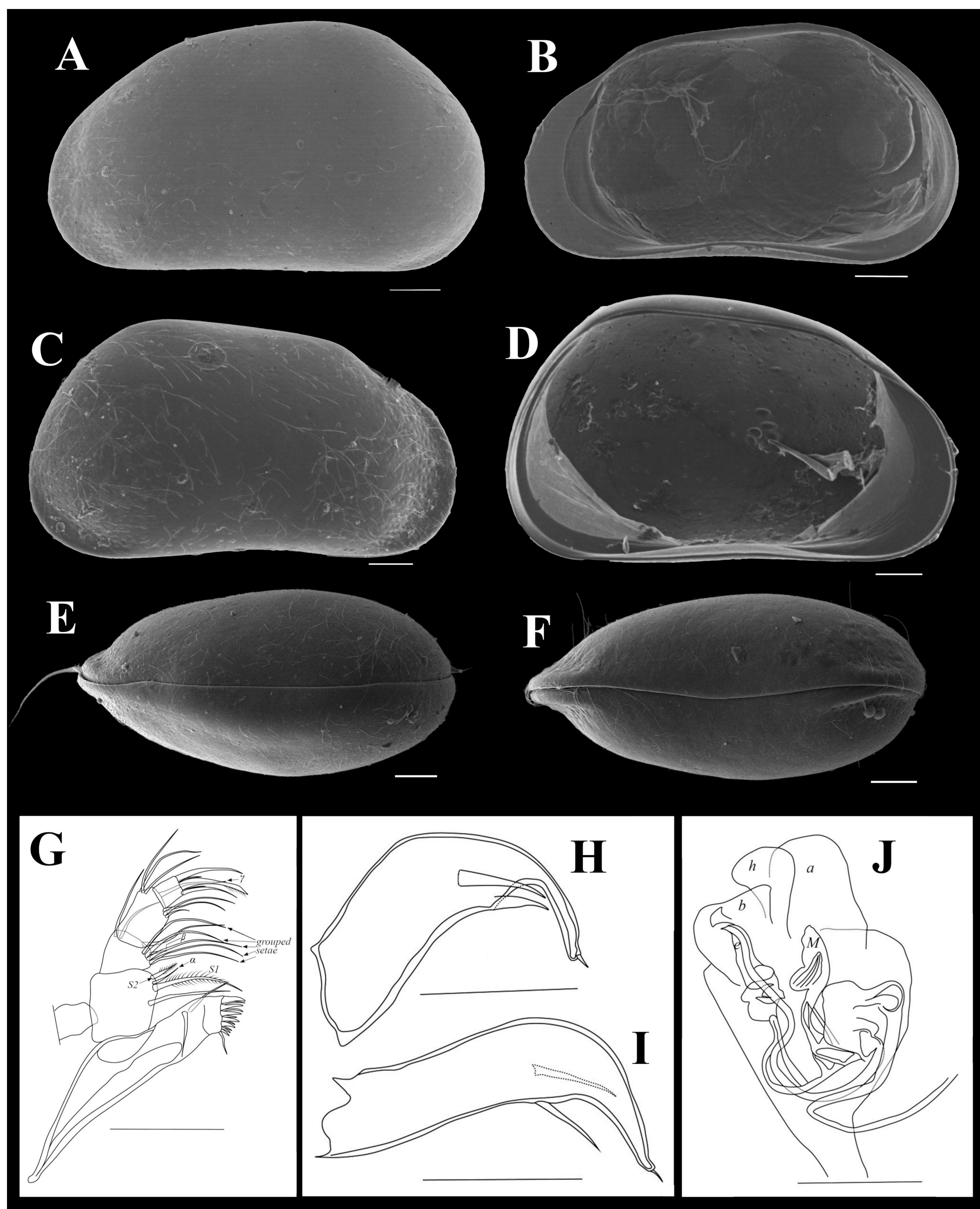


Figure 1. *Pseudocandona cheni*. A–B, male, dyzoc567 (holotype). A, left valve, exterior view. B, right valve, interior view. C–D, female, dyzoc569. C, right valve, exterior view. D, left valve, interior view. E, female, dyzoc813, carapace, dorsal view, anterior to left. F, female, dyzoc814, carapace, ventral view, anterior to left. G–J, male, dyzoc567 (holotype). G, mandible (exopod not shown). H and I, right and left 5th endopods. J, hemipenis. Scale bars: 100 μ m.

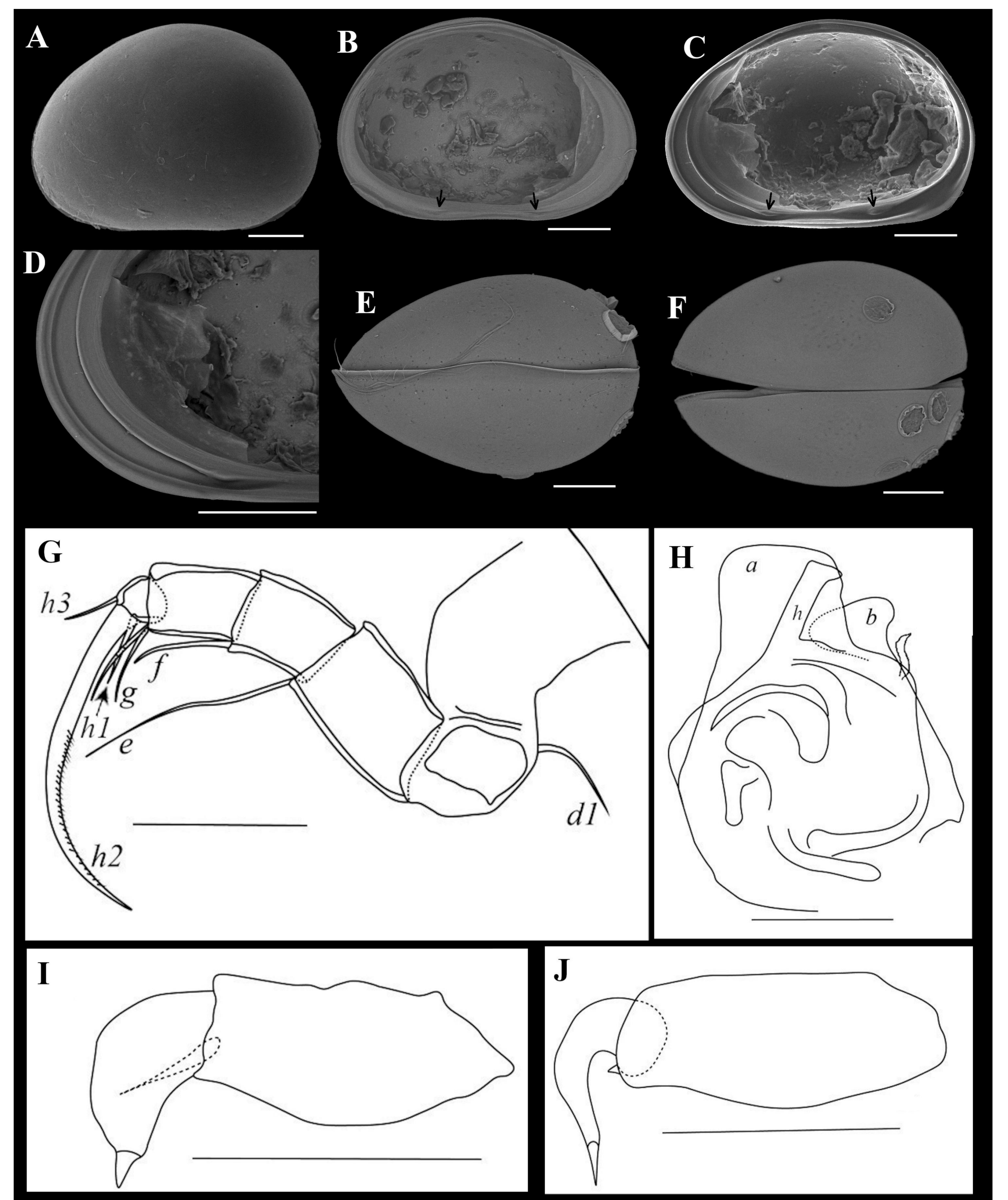
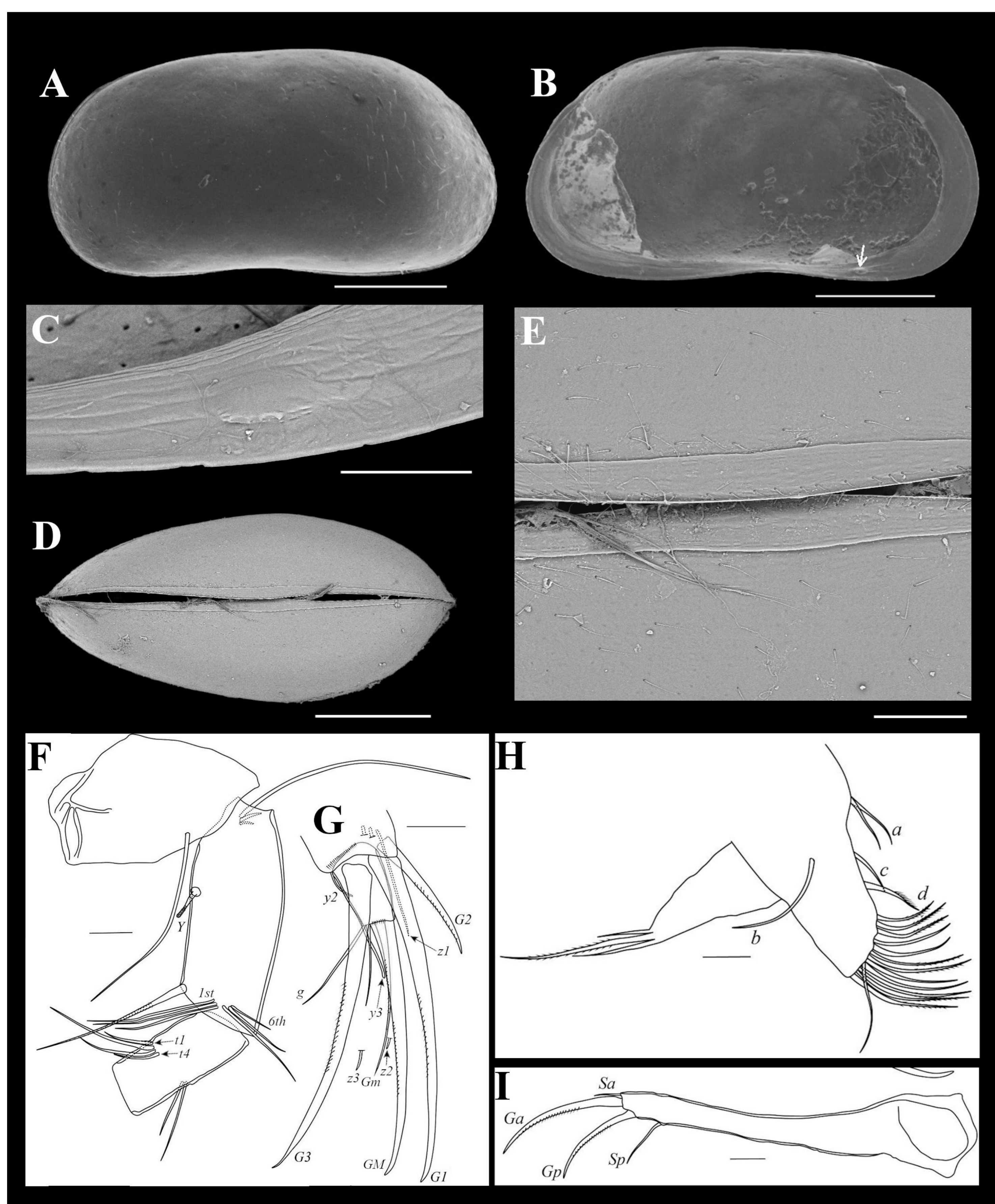


Figure 2. *Cyclocypris pangi*. A, female, dyzoc558, left valve, exterior view. B–D, female, dyzoc675. B, left valve, interior view, sockets arrowed. C, right valve, interior view, pegs arrowed. D, antero-ventral part of C, showing inner list. E, sex unknown, dyzoc816, carapace, ventral view, anterior to left. F, sex unknown, dyzoc817, carapace, dorsal view, anterior to left. G–J, male, dyzoc559 (holotype). G, 6th limb. H, hemipenis. I and J, left and right 5th endopods. Scale bars: 100 μ m.



In ISO19, we presented the morphology of three species of non-marine ostracods from northern China we recently published (Yu et al., 2022). These include *Pseudocandona cheni*, *Cyclocypris pangi*, and *Tonnacypris rectangularis*. *Pseudocandona cheni* is a member of the *compressa* group, and is readily recognized by the structure of the hemipenis as well as thick trunks of the male fifth limb endopodites. *Cyclocypris pangi* can be identified based on the morphology of the hemipenis, in addition to the rectangular trunk of the male fifth limb endopodite. *Tonnacypris rectangularis* can be distinguished from other species in the genus by its distinct sub-rectangular carapace alone, although other characters such as the lengths of the swimming setae, the lengths of the distal claws on the second antennae, and the morphology of the pincer organ on the seventh limb, offer additional information for identification. Our work improves the understanding of the poorly known extant non-marine ostracod fauna of Inner Mongolia and Beijing, and offers taxonomic guide for future studies of the ostracods in these regions.

Reference

Yu N, Ma SX, Wang QW, Zhai DY*, 2022. Three new species of non-marine ostracods (Crustacea, Ostracoda) from small water bodies of northern China. *ZooKeys* 1097, 183–207. <https://doi.org/10.3897/zookeys.1097.79713>

Figure 3. *Tonnacypris rectangularis*, females. A, B, dyzoc575 (holotype). A, left valve, exterior view. B, left valve, interior view, peg arrowed. C, dyzoc577, peg on antero-ventral part of left valve. D–E, dyzoc819. D, carapace, ventral view. E, outer list in central part of D. F–G, dyzoc575 (holotype). F, part of second antenna. G, distal part of second antenna. H, dyzoc580, 5th limb (exopod not shown). I, dyzoc575 (holotype), uropod. Scale bars: 500 μ m for A, B, and D, 100 μ m for others.