

## A new Y-shaped trace fossil attributed to upogebiid crustaceans from Early Pleistocene of Italy

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Y-shaped trace fossil (U-shaped upper part with a basal shaft), *Parmaichnus stironensis* igen. nov. et isp. nov. penetrates from a discontinuity surface cut in Early Quaternary mudstones in the Stirone Valley, Northern Italy. It is attributed to upogebiid decapod crustaceans. *Parmaichnus* differs from *Psilonichnus* by the presence of turning chambers in the upper part of the burrow. The turning chambers are considered to be an important taxonomic feature of upogebiid burrows. *P. stironensis* occurs together with *Thalassinoides* cf. *paradoxicus* (produced probably by callianassid crustaceans) and wide U-shaped pyritised cylinders (supposedly produced by balanoglossid hemichordates).

**Key words:** Trace fossils, Parmaichnus, Psilonichnus, crustacean burrows, Upogebia, foredeep, Pleistocene, Italy.

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