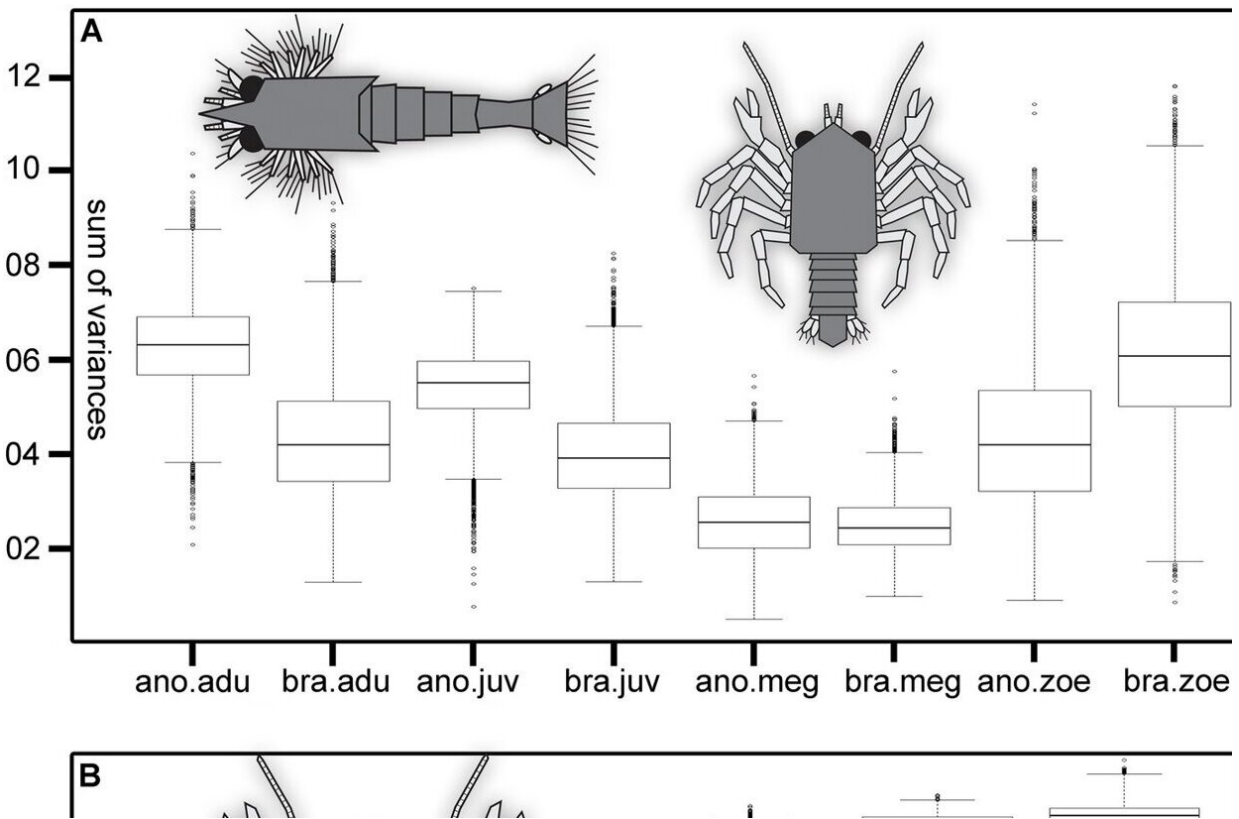


# Biodiversity in crabs: More than counting species

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Credit: *Scientific Reports* (2024). DOI: 10.1038/s41598-024-58780-7

Biodiversity is often equated with species numbers. A team led by LMU zoologist Professor Carolin Haug has shown that matters are a good deal more complicated than that. The researchers compared the shield shapes

of "true" crabs (Brachyura) and "false" crabs (Anomura), the latter of which include squat lobsters and hermit crabs.

The findings are [published](#) in the journal *Scientific Reports*.

Their results showed that false crabs have a greater variety of shield shapes, which are directly related to the lifestyle and thus the ecological role of the animals, even though there are more species of true crabs.

"A different picture emerges when we observe the animals during their development," says Haug. In their plankton-dwelling larval phases, the diversity of true crabs is highest.

Meanwhile, diversity is lowest in an [intermediate phase](#) that true and false crabs go through and in which the transition from planktic to benthic (bottom-dwelling) habitat takes place; moreover, this is where they most closely resemble their early ancestors.

"Our study indicates that [biodiversity](#) is much more complex than can be comprehended by species numbers alone," Haug points out.

**More information:** Florian Braig et al, Morphological diversity in true and false crabs reveals the plesiomorphy of the megalopa phase, *Scientific Reports* (2024). [DOI: 10.1038/s41598-024-58780-7](https://doi.org/10.1038/s41598-024-58780-7)

Provided by Ludwig Maximilian University of Munich

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