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# Baby assassin bugs lure in deadly ants

**SPECIES** *Ptilocnemus lemur*

**HABITAT** Australian forests, although they are hard to spot as they keep a low profile by blending into tree trunks

Here are two helpful tips for hunting other animals. First, be a full-grown adult so you are strong and skilful enough to take them on. Second, if at all possible, surprise them so they can't attack you first.

The feather-legged assassin bug ignores both of these rules. These insects hunt even while they are immature nymphs, often targeting venomous ants bigger than themselves. And to do so, they lure the ants into trying to sting them.

## Tempting attack

Plenty of predators trick their prey into approaching by dangling a lure, such as the anglerfish's famous light, and then strike. But assassin bugs are the only hunters we know of that encourage another predator to attack them, and that will not themselves attack until it has grabbed them.

It sounds suicidal, but it works.

The nymphs of assassin bugs already have the adult body shape. Matthew

Bulbert of Macquarie University in Sydney, Australia, and his colleagues tracked them to see how they hunted in the wild.

A hungry nymph first waves its hairy hind legs, luring an ant to grab them. It is nothing if not ambitious, often targeting jack jumper ants (*Myrmecia pilosula*), the venom of which can kill an adult human.

Once the ant has a grip and is threatening to sting, the nymph pulls out a wrestling move, swivelling on its leg joint to position itself on top. Then it targets the ant's weak spot, piercing the back of its head.

In lab experiments, the bugs always waited until the ant had grabbed them before attacking it, even if they had not eaten for two weeks.

By inviting attack from an ant, the nymph risks being injured or killed. "It is equivalent to a jackal preying on a lion, and expecting the lion to grab the jackal's legs first," says Bulbert. "It was very much unexpected."

The strategy may seem risky, but Bulbert found it was effective. Once an ant had grabbed a nymph, the nymph killed it almost every time. The team never saw a nymph killed.

The nymphs' lure also pays off in a big way. Jack jumper ants can be three times the nymph's length, so just one provides the bug with a mega meal.

## Defence into attack

But the strategy is not perfect. Bulbert found that only a small percentage of ants, usually the much larger ones, fell for the ploy.

How this behaviour evolved is a mystery. "Our best guess at this stage is that it may have started as a defensive strategy used to initially ward off ants, but has eventually been co-opted into a predatory strategy," says Bulbert.

Certainly assassin bugs have evolved a plethora of hunting strategies. One species lures spiders out across their webs by plucking at the threads in a way that resembles the struggles of a trapped insect.

Another has a long neck, allowing it to lean into spider webs and take their owners by surprise.



Mark Moffett / Minden