

ALTRUISM Brotherly love reaches its limits inside a fig.

Bloodied brothers

There's a lot of biological truth to the expression 'blood is thicker than water.' Throughout nature, individuals tend to be nicer to relatives than to random members of the population on the basis that relatives share a proportion of their genes. But such nepotism is not inevitable, as a new study of fighting in a tiny wasp illustrates.

The males of many fig wasp species don't get out much, completing their entire life-cycle within the figs in which they were born. Their sole mission in life is to mate with females, and they fight ferociously with other males for this privilege.

Because of their lack of dispersal, males are likely to share their fig with brothers as well as unrelated individuals. Theory predicts that brothers should go

easy on each other during fights, but this seems not to be the case.

The average relatedness between males within a fig differs between wasp species. When Stuart West of Edinburgh University and colleagues compared the injuries sustained by the males of different species during fights, they found that fighting was equally intense regardless of relatedness. Injuries were greater, however, in species with smaller proportions of females in the population, suggesting it is competition for females rather than relatedness that governs fighting (*Nature*, vol. 409, pp510-2).

Behaving altruistically towards a close relative is usually advantageous, because it increases the chances that shared genes will be passed on. "But in the closed world of a fig," says team member Martyn Murray, "the brother you let off the hook today is likely to deprive you of access to the only available female tomorrow." Even brotherly love has its limits.

STUART BLACKMAN

Dozens of eggs. Many female fig wasps may lay eggs in the same fruit (below), but males are not so keen on sharing, even with their brothers.



George Weiblen