

'Spiteful gene' in organisms will defend its closest kin

EXPERTS have discovered a "spiteful gene" which causes organisms to deliberately harm others – and themselves – in order to help their closest relatives.

Researchers found that bacterial cells and some insects will kill even near relatives to ensure the survival of their closest kin.

The existence of spiteful behaviour has previously been dismissed as an implausible idea.

But the study by a team from Edinburgh University has found the behaviour to be much more common than once thought.

Researcher Andy Gardner, of the university's Institute of Cell, Animal and Population Biology, said: "Spite has been neglected by social evolution theory, but we have shown that when there is strong competition between individuals it becomes a lot easier for spite to evolve.

"This means that individuals are happy to hurt their social partners, even if they hurt themselves in the process."

Researchers identified several examples of spiteful behaviour, including a behaviour previously described as "altruism".

The PhD student said: "Rather than being altruistic towards kin they are actually spiteful towards non-kin."

The study, which looks at different species including bacteria and ants, is published in the *Journal of Evolutionary Biology*.