

# Scientists study insect 'egg police'

November 8 2006

---

British and Belgian scientists say social sanctions, not voluntary altruism, stop workers in insect societies from reproducing.

Writing in a brief communication appearing in the journal *Nature*, Francis Ratnieks of Britain's Sheffield University and Tom Wenseleers of the Catholic University of Leuven, Belgium say workers of many species of ant, bee and wasp do not lay eggs despite having functional ovaries.

Ratnieks and Wenseleers studied 10 single-queen species -- nine Vespidae wasps and the honeybee -- to test theories of worker altruism, social coercion and cooperation.

They found that when worker-laid eggs are killed by the queen or other workers, and when that type of "policing" is effective, the advantage to workers of laying eggs is reduced.

They argue social sanctions are what discourage selfish behavior and quip that that is in line with better law enforcement leading to fewer individuals behaving antisocially in human societies.

*Copyright 2006 by United Press International*

Citation: Scientists study insect 'egg police' (2006, November 8) retrieved 3 May 2024 from <https://phys.org/news/2006-11-scientists-insect-egg-police.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.