



Pests in the news - Robot Roaches!

To try to understand how individual cockroaches in a population interact, a group of scientists at the Universite Libre de Bruxelles in Belgium have created robotic cockroaches that can behave just like real cockroaches and can persuade the insects to congregate in unusual places. The robot roaches don't really look like real roaches - they look more like matchboxes on wheels - but by programming them to behave like a roach and by coating them with cockroach pheromones, the real roaches don't seem to notice the difference.

Cockroaches are gregarious insects with a tendency to congregate in one spot, usually a darker sheltered area. The experiments were conducted in an arena with two shelters, with one shelter darker than the other. First, robots were programmed to behave just like their real counterparts, wandering around randomly but spending more time in a dark place. Before long, all the robots and insects were under the same shelter. Then, the robots were reprogrammed to prefer the lighter shelters. About 60% of the time, the robots managed to influence the insects into congregating under the lighter shelter too. The experiment, therefore, showed the behaviour of just a few individual cockroaches could dramatically effect that of the whole group.

This probably won't develop into a new method of cockroach control with robot roaches wandering our homes and luring their real counterparts into a trap. To do that, they'd have to build them with the ability to climb up walls or wander through pipes. Still, even if isn't applicable to pest control, this is pretty cool science!



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