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DISCUSSION

The present study was designed to investigate the effects of a single, high-dose injection of a synthetic pheromone on the behaviour of male *Drosophila melanogaster*. The results show that the pheromone significantly increased the number of courtship attempts and successful matings in a single trial. This effect was observed in both virgin and mated males, suggesting that the pheromone acts on both sexes. The increase in courtship attempts was not due to an increase in the number of males present, as the number of males present was controlled for in the experiment. The increase in successful matings was also not due to an increase in the number of matings, as the number of matings was controlled for in the experiment. The results suggest that the pheromone acts on the male's behaviour, increasing his motivation to court females. This is consistent with the hypothesis that the pheromone acts as a sex attractant. The results also suggest that the pheromone acts on the female's behaviour, increasing her receptivity to courtship. This is consistent with the hypothesis that the pheromone acts as a sex attractant. The results of this study have implications for the use of synthetic pheromones in pest control. Synthetic pheromones can be used to attract and trap pests, or to disrupt their mating. The present study shows that synthetic pheromones can be used to increase the mating success of a pest, which may be useful in pest control. Further research is needed to investigate the effects of synthetic pheromones on the behaviour of other species.

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- Rodríguez-Teijeiro, J.D., Puigcerver, M., Ortiz, C., Gallego, S. & Nadal, J.** 1997. Incubation behaviour of the Common Quail (*Coturnix c. coturnix*) under conditions of food abundance. *Historia Animalium* **3**: 45–53.
- Skutch, A.F.** 1962. The constancy of incubation. *Wilson Bull.* **74**: 115–152.
- Smith, J.N.M., Arcese, P. & McLean, I.** 1989. Age, experience, and enemy recognition by wild Song Sparrows. *Behav. Ecol. Sociobiol.* **14**: 101–106.
- Smith, H. & Montgomerie, R.** 1992. Male incubation in Barn Swallows: the influence of nest temperature and sexual selection. *Condor* **94**: 750–759.
- Stutchbury, B. & Robertson, R.** 1987. Within-season and age-