رتبه دوم خا*ر*جی Foreign Second Winner



Project Title:

A Comprehensive Survey on Pollination

Researcher:

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New Zealand

Company:

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عنوان طرح: مطالعه جامع گرده افشانی

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تحقيقات علمي حشرات دنوان

Abstract:

His comprehensive Hypothesis solves the honey bee dance language controversy. The honey bee dance language hypothesis proposed by Karl von Frisch claims that a honey bee can indicate the direction and distance of a new food source through a "dance" in the hive. Bees then fly directly to the food sources.

However, an alternative hypothesis expounded by Adrian Wenner is that these bees search only for odour plumes. His hypothesis is that the dance contains information about ecological reality in which bees exist which has hitherto not been recognized and which is utilized by bees to maximise their foraging success. If a new, desirable source of food appears, other new locations of the same source are more than likely to soon appear. Some bees that follow the dance may use the distance and direction infomation to avoid the known location, in order to search in other directions for new locations of the new food source which they will find by following odour plumes. The colony can thus most quickly both exploit the known location, and find and exploit new location of the same food.

The hypothesis could be of great value to the science of crop pollination, as it explains aspects of bee behaviour that have puzzled bee researchers for half a century or more. Also the hypothesis is an example of using logic to look at a situation in a whole new way. He has published more than 100 papers.

