

Scientists explore new concepts of plant behavior and interactions

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Plants 'talk' to each other through mycorrhizal networks, but can we eavesdrop on what plants are talking about? They can sense chemicals through their roots, but can we sensibly talk about how they 'search' for food? While a lot is already known about plant perception, our ecological understanding of plants has largely focused on seeing plants as the sum of a series of building blocks or traits. A new special issue *Using Ideas from Behavioural Ecology to Understand Plants* edited by JC Cahill of the University of Alberta, and published by *AoB PLANTS* gathers researchers who have taken a new approach, theorising plant activity in terms of behaviour.

The term "behaviour" has been controversial in the past, particularly given the lack of a central nervous system in plants for cognition. The authors in all the papers in this issue argue this is missing the point. Just as reducing animals to cells and hormones will miss a large aspect of what we can learn about animals, taking a behavioural view opens up new opportunities for plant research. Papers in the issue include studies of plant interactions with their environments as well as 'social' interactions with other plants of both the same and other species.

On the launch of the issue, JC Cahill said: "Scientists have historically viewed [plants](#) as factories. Give the right resources as inputs and you get your desired outputs. This paradigm is shifting out of favour, and its place a more organismal view of what being a plant means. This special issue includes a number of articles which describe this more holistic view of plant biology, and provide a framework for future research and

understanding."

The ten papers in this issue draw upon the increasing body of work in the field of Plant Behavioural Ecology, and will form a foundation for further work in this field.

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