Root intelligence: Plants can think, feel and learn

With an underground "brain network" and the ability to react and remember, plants have their own kind of intelligence – and may even cry out in pain

STEVE SILLETT has been hanging out with giants all his working life. He climbs and studies the canopies of giant redwoods along the coast of northern California. Sometimes, when traversing from the top of one tree to another, he is awestruck by the life that surrounds him. "There's this awareness of where you are, 90 metres up, in this breathing, living forest of ancient beings," says Sillett, who is at Humboldt State University, California. "You get into this space where you are interacting with another organism that functions completely differently."

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Had Aristotle hung out among redwoods, he might not have consigned plants to the bottom rungs of his "ladder of life". But he didn't, and botanists have been tormented by his legacy. For centuries, few dared challenge his judgement. Now that's finally changing. In the past decade, researchers have