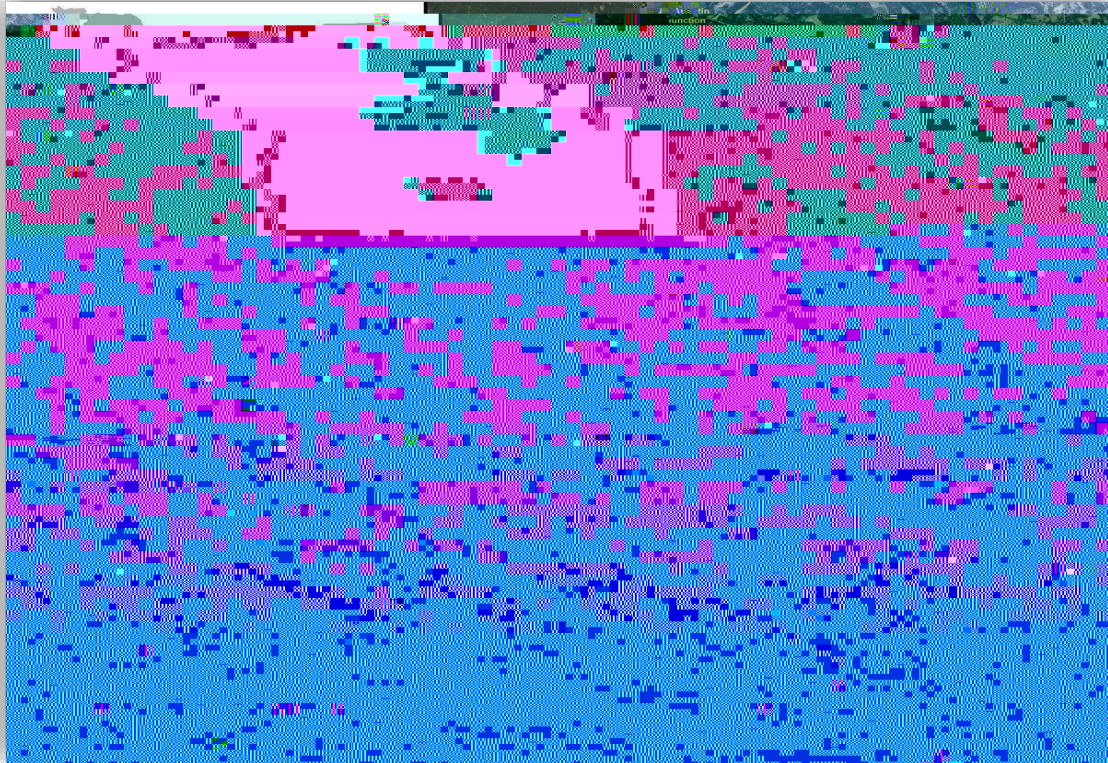




These fungi create a mat of threads that connect an estimated 90% of land plants by linking



But is it really the largest single organism? Think again. If we understand the wood wide web properly, almost *every* plant and tree on each continent is connected into a single organism. We are not thinking big enough.

I found the revelation of the Wood Wide Web's existence, and the increased understanding of its functions fascinating. How is it that such an incredible network can exist and go unnoticed? Well, it all happens underground, in a place inaccessible to easy observation. This natural social network of sharing plants raises big questions. If different plants and species literally grow into one another and share key resources, where do species begin and end? When we study a forest or a garden, should we not better think of it as a single entity – a super-organism rather than a grouping of independent individualistic trees and plants? Finally, what are we to make of what trading, sharing or even friendship might mean among plants.

Plants have more secrets to share: take two climbing bean plants. Each is given its own pole to climb. If you then put a connecting pole between them, they compete for it. What is interesting is the behaviour of the loser: it often senses if the other plant has reached the connecting pole they both were seeking and then starts to find an alternative. This demonstrates the plants were aware of their physical environment and the behaviour of the other plant. If these plants were animals we might call this consciousness.

We too often think of plants as rather passive and dull compared to animals. But plants are fizzing with information being exchanged between roots and leaves and flowers and pollinators and the environment all the time. Did you know that if a pollinator passes a flower, within three minutes, the plant will have increased the sugar content of its nectar from between 12 and 17% to 20%? The plant 'heard' the bee and acted quickly. All this information is being processed in the absence of a brain. We don't know how. Does this not

blow your mind?