



Brilliant Green: the Surprising History and Science of Plant Intelligence

By Stefano Mancuso and Alessandra Viola

Island Press

ISBN 13: 978-1-61091-603-5

ISBN 10: 1-61091-603-4

March 2015

Translated from Italian version *Verde Brillante: Sensibilita e intelligenza del mondo vegetale*, 2013 Giunti Editore S.p.A. Firenze-Milano

The revelations of this book begin with the basic differences between plants and animals, and how humans have been led to believe plants are purely vegetative with no ‘intelligent’ qualities. They talk about how science disproves all those human assumptions and about plant supremacy. Everyone seems to know plants can live without animals, but not even humans can live without plants. They (plants) also reign on Earth as 97% of all life is plant, and the remaining 3% is animal, including humans.

Mancuso and Viola describe how plants organize their ‘bodies’ on an equivalent basis for all parts rather than the specialization of specific organ systems like animals. This provides plants the chance to recuperate even after losing up to 95% of their body. The authors explain how plants have all the senses of humans but use different methods. Plus they have many more sense. Humans, it seems, must change their thinking to see the truth of how smart plants really are. Plants hear, see, speak, feel, and smell but in different capacities using energy waves and operating at the molecular level. They seem to be great molecular manipulators. They also covered how plants communicate, both within the body using three different systems, and outside the body by producing different scents. They provided some striking examples of how adept plants, who remain in situ, are at contacting other plants and animals.



Photo taken by Bernard Dupont, Creative Commons.

Plants as well as communicating with animals can manipulate them. For instance think about this example from the book: “Ususally, when we speak of mimesis we think of animals such as chameleons or walkingsticks. But their considerable mimetic abilities are as nothing compared to what an orchid like *Ophrys apifera* can do ...Its flowers are able to mimic perfectly the shape of the female of certain nonsocial hymneoptera [wasp] ...And that isn't all: besides the female insect's shape [and color], the orchid imitates the consistency of its tissues, its surface (including the fuzz on its body), and of course also its scent, secreting pheromones identical to the ones produced by females ready to mate” (page 113).

This was only one example, there are more. Some plants can call predator friends in the air or underground to attack their own predators. The question eventually becomes do humans manipulate plants with selective propagation and gene manipulation for their own purposes, or have plants been partners in this endeavor all this time? And don't tell me it's all evolution, because that same evolution brought us to where we are today.

Robin Courtright