

University of Rhode Island DigitalCommons@URI

Technical Services Department Faculty Publications

Technical Services

2-15-2015

Review of Mancuso, Stefano and Alessandra Viola. Brilliant Green : The surprising history and science of plant intelligence.

Judith B. Barnett University of Rhode Island, barnettj@uri.edu

Follow this and additional works at: https://digitalcommons.uri.edu/lib_ts_pubs



Part of the Library and Information Science Commons

The University of Rhode Island Faculty have made this article openly available. Please let us know how Open Access to this research benefits you.

Terms of Use

This article is made available under the terms and conditions applicable towards Open Access Policy Articles, as set forth in our Terms of Use.

Citation/Publisher Attribution

Judith B., Barnett. "Brilliant Green: The Surprising History And Science Of Plant Intelligence." Library Journal 140.3 (2015): 126.

This Book Review is brought to you by the University of Rhode Island. It has been accepted for inclusion in Technical Services Department Faculty Publications by an authorized administrator of DigitalCommons@URI. For more information, please contact digitalcommons-group@uri.edu. For permission to reuse copyrighted content, contact the author directly.

Mancuso.

Mancuso, Stefano and Alessandra Viola. Brilliant Green: The surprising history and science of plant intelligence.

Presenting an unorthodox view of botany, Mancuso (Univ. of Florence, Plant, Soil and Environmental Science) observes that 99.7% of life on earth is plant life, and all animals, including humans make up the remaining .3%. Humans cannot live without plants, but plants can live without us and depend only on the sun. The author states that plants have our five senses, as well as many others, such as sensing electromagnetic fields and humidity. Plants can respond adaptively to external stresses, and indeed have intelligence, defined as problem-solving ability. While they lack brains, eyes, ears, and noses, their roots, leaf parts, mechanosensitive channels (small sensory organs) and each cell possess powers to sense and respond to the environment. Various experiments are described, such as playing music of particular frequencies to grapevines which ripened earlier and produced grapes richer in flavor and color. Plants supposedly repel insects by sending out chemical substances to make leaves unappetizing and indigestible. Tell that to gardeners and nursery growers in the Northeast U.S. whose oaks and maples were attacked by winter moths in the spring of 2014! The author believes that human intelligence is quantitative, not qualitative and that a sizable literature even exists on bacterial intelligence. Many plant scientists disagree with the premises of the author's field of plant neurobiology. VERDICT: Many references online question these views, although the author receives funding from Italian sources for his International Laboratory of Plant Neurobiology in Florence. Readers with an academic background in botany on an undergraduate or graduate level may find this volume provocative. It may be misleading for other readers, and contrary to the observations of many gardeners. Who can predict however, whether these revolutionary scientific views will gain future acceptance? Includes bibliographical references and illustrations.

Judith B. Barnett