The Botany of Desire: The Missing Chapter

Creative Writing and Discussion in Science

Introduction

In *The Botany of Desire: A Plant's-Eye View of the World*, Michael Pollan suggests that many plant species have exploited humans to better their abilities to reproduce and succeed. These benefits include increased distribution, flower, seed, and defense chemical production. These relationships benefit both humans and plants alike. In short, he proposes that these plants and humans have developed a reciprocal relationship, whereby plants, by way of 'offering' humans a wide variety of benefits, have been the architects of this symbiosis.

Although he provides much evidence for this notion for four plant species/groups, the tulip, potato, marijuana, and the apple, many other plants fit this arrangement very nicely. Your challenge is to write a summary of another chapter to Pollan's book – the *missing chapter*, one he never wrote. For this chapter summary, please pick another plant species or group that has exploited humans for their advantage. This does not mean that humans could not have benefited from the relationship, quite the contrary, but there must be a clear advantage gained by the plant.

Please provide support for your choice of species/group by explaining how your selection fits into Pollan's framework as presented in his book. For example, you may want to include how the plant's habitat has become broader, how it now produces more seeds or flowers, or how it has become more competitive because of fostering a relationship with humans.

Please use Michael Pollan's book, *The Botany of Desire: A Plant's-Eye View of the World*, or the PBS documentary entitled, *The Botany of Desire* as your main source of inspiration and background on Pollan's framework. Then please incorporate, and cite, any sources that you feel are necessary to support your explanation.

Assignment Details

Chapter Summary Deliverable

- 1. Chapter summary should be 4 5 pages, not including title and works cited pages.
- 2. Chapter summary should contain a separate title and works cited pages.
- 3. Chapter summary should contain in-text citations in APA format.
- 4. Chapter summary should contain a minimum of 5 sources to support your work. Emphasis should be placed on primary research sources, when possible.

Interactive Discussion

In addition to the chapter summary deliverable, a discussion thread will be created on the course website to facilitate sharing of findings. It is important to understand that everyone can benefit from the work and research of others. As a part of this assignment, it is expected that you contribute in a meaningful way to the discussion threads using your research and completed chapter summary. The discussion threads will be created by the instructor and will emphasize the following concepts:

- 1. Coevolution and its impact on reciprocal relationships of organisms
- 2. Artificial selection and its effect on the speed and path of organismal evolution
- 3. Genetic modification and monoculture growth of organisms

American Society of Plant Biology Guest Blogger (Optional)

Those who would like to share their work more widely are encouraged to submit their work to the American Society of Plant Biology (ASPB). Submissions will be considered as a guest blog post on the main ASPB blog (www.blog.aspb.org). To be considered, please:

- 1. Submit full text of chapter summary to Katie Engen (katie@aspb.org).
- 2. Submit three line summary
- 3. Submit picture of author with a credit/copyright release

Core Concepts in Plant Biology

The following are the core concepts in plant biology, as established by the American Society of Plant Biologist that this assignment addresses:

- Plants live in close association and interact with other organisms, including other plants, animals, fungi, and microorganisms.
- Human activity has affected global plant diversity, especially through the alteration of habitats.

References:

Pollan, M. (2001). *The botany of desire: A plant's eye view of the world.* New York: Random House.