

SA #4**Botany and Stewardship –
Tapping the Botanical Knowledge Base****READING and STUDY PLAN:**

Take time to review your lecture/discussion notes and Study Outline in SA #3 after our discussion of “Botany and Stewardship.” We will continue that discussion in our next meeting. Meanwhile, your cooperative learning group has been assigned one of the categories of plant or microbial uses below. Our purpose is to consider the variety of plant/microbial uses and the ways in which research in these botany-related topics is “yielding fruit.”

READING: Assigned textbook pages or web pages given with your assigned topic (below).

ASSIGNMENT:

This is both an individual and cooperative group assignment. First, locate the designation of your cooperative learning group from the list below (e.g. 1A) and utilize the accompanying reference to your textbook or website to become informed of your group’s assigned topic. Before consulting with your group, complete the reading and make notes on your copy of the **Attendance/Participation Form** on the next page. Then, converse with your group to decide the content and emphasis of your group oral report, and which (one or two) members of your group will report to the class. Please bring your individual completed copy of the **Form** to class as evidence of your completion of the assignment and as an aid to final discussion in your group

Group:

1A – Companion Planting – “[Comp. Planting](#)” weblink; and Stern App.2, Table A2.3, p. 531-535

1B – Mutualisms – use Stern, pp 74-75 and search Molles’ text index for more pages.

1C – “Invasive Plants” – What are they? What makes them invasive? See [USDA web article](#).

1D – Bio-herbicide from a fungus to control an invasive plant species? See [USDA web article](#).

2A – Plant (Cayenne Pepper) produces anti-fungal compound? See [USDA research article](#).

2B – Edible Native Plants and Fungi– Appendix 3, Table A3.1, p. 537-540

2C – Poisonous Plants – Appendix 3, Table A3.2, A3.3, p541-543

Medicinal Plants – Appx. 3, Table A3.4, p537, 543-553 [Exclude “Memory Enhancing” species.]

2D – Select from “Medicinal Plant” list by name in the range beginning from A to L

3A – Select from “Medicinal Plant” list by name in the range beginning from M to Z

3B – Plant Sources of Memory Enhancing Compounds– p. 554

3C – Cholesterol-lowering Plants or Derivatives – p. 554-555

3D – Plants or Fungi Containing Hallucinogenic Substances – Appx 3, Table A3.5, p. 555-556

Extra: Plants for Flavoring or Seasoning – p. 555 and Appendix 3, Table A3.6, p. 557-559

On either side of the river was the tree of life, bearing twelve kinds of fruit, yielding its fruit every month; and the leaves of the tree were for the healing of the nations. – Rev 22:2

NAME(S): _____

Note: This is a Cooperative Learning Group Discussion Feedback form for use in presenting your responses.

INSTRUCTIONS: Individually complete your reading/study assignment, then, meet with your group or confer through threaded discussion in WebCT to formulate the content of your group response which should address each of the following parts as related to your particular topic:

1. State your assigned category (or Group #) and title. Briefly explain the value of plants/microbes in this category and define any important terms or concepts.

_____ Title: _____

2. Illustrate this use of plants/microbes with three examples or discussion points that you deem most meaningful and interesting to the class.

a. _____

b. _____

c. _____

3. Suggest one question or an idea for further scientific investigation which was triggered by your reading. Some slight additional research beyond your text may be needed (or inviting to your interest).