Overview: The text was used for a Botany course intended for second or third year college students. This was a one-semester course presented three times a week for 50 minutes per session. The book consists of 25 chapters.

Content: The Development of Plant Study
The Nature of Life
Cells
Tissues
Roots
Stems
Leaves
Flowers, Fruits, and Seeds
Water in Plants; Soils
Metabolism in Plants
Growth
Meiosis and Alternation of Generations
Genetics
Plant Biotechnology
Evolution
Plant Names and Classification
Kingdom Monera and Viruses
Kingdom Protista, Part 1
Kingdom Protista, Part 2, Fungi and Lichens
Bryophytes
Ferns and Their Relatives
Gymnosperms
Flowering Plants
Flowering Plants and Civilization
Ecology

Each chapter begins with several learning goals to give the student an idea of what should be achieved as well as an outline of the chapter contents and a brief overview describing the main points given in the chapter. After the chapter content, a lengthy summary of the material is given restating the most important concepts. This is followed by review questions to check the students learning and discussion questions that can be used to stimulate further understanding in the classroom. The author also offers
several suggestions for additional reading. The review and discussion questions are assessment opportunities for the student.

The author provides approximately twenty references from universities across the country. There were no web sites given in the text, and there was no cost available.

**How the textbook meets the goals of the course for which it is intended:**
This text exceeds the goals of the class for which it was intended, a basic botany course. The author begins with an in-depth overview of basic biology concepts, covers all classifications of plants and their impact on civilization and ecology. The book also includes five appendices: Scientific Names of Organisms Mentioned in the Text, Biological Controls, Useful Plants and Poisonous Plants, Houseplants and Home Gardening, and Metric Equivalent and Conversion Tables. These could be useful to individuals interested in the subject on a personal level.

**How valid, accurate, current, appropriate the text is:**
At the time it was used (1996), the information was very current and, I believe, would still hold strong today. The text offers detailed information with excellent photos and diagrams to demonstrate the material. It is certainly appropriate for a second or third year college biology student as it thoroughly covers all aspects of plant biology, processes, and classifications.

**Readability:**
I did four samples using the Fry Readability Graph and determined the text to be at the level of a thirteenth to fourteenth year student.

**Understandability:**
Students using this text would already have been exposed to the type of scientific vocabulary presented in the book and, thus, be able to obtain a good understanding of the new vocabulary used. The information reviews and builds upon knowledge that would have been learned in earlier coursework. Many photos and diagrams are provided to give an image to the descriptions of tissues, processes, etc. The concepts begin with the most basic and build gradually and logically into more complex forms.

**Learnability and Organizational Pattern:**
The text is organized in a clear and simple pattern. Chapter contents are presented and outlined at the beginning of the chapter, and an introduction begins the chapter. A glossary, index, and table of contents are included. Questions do not draw on the organizational pattern of the chapters. Information progresses from most basic of biological functions up through the simplest plant life forms and successively on to more and more complex forms. The organizational pattern would best be described as sequential order and definition/explanation.

The book does provide summaries and review and discussion questions to reinforce the information the student has covered. The chapters are full of pictures and diagrams to aid in understanding of the material. Although the author provides additional reading
suggestions, there are no activities or lab experiments to further involve the student in the concepts presented.

The visual aids in the book provide interest to the student. A glance at the text, however, looks like heavy reading. Chapter titles and subheadings are clear indicators of the information to follow. Additional activities would have provided further interest and motivation to the student.

**Treatment of gender and ethnicity:**
There is very little mention of individuals in the book. There is mention of the early scientists who discovered the building blocks of science and biology, primarily men.

**Encouragement to practice, apply, and extend learning:**
As stated, each chapter provides review and discussion questions and additional reading suggestions.

**Sensitivity to student experience and prior learning:**
It would be helpful to the student to have has basic biology and chemistry, but the author does cover well the basics and history of biology and chemistry in nature before beginning talk of plant life.

**Format:**
As stated, the text is clearly and logically organized in progressive order. It is full of excellent visual aids. The book itself is in fair condition as it is a used edition. The cover could be more interesting and eye-catching.

**Evaluation:**
Overall, this is an excellent text on the intended topic. It gives very detailed information on all aspects of botanical life as well as visual aids that provide the student with a clear picture of what the author describes, whether it be a type of cell, a specific plant, or a plant life cycle. The reading is easily understood and ample means are provided to determine unknown meanings. A student at the appropriate level should be very capable of comprehending the contents.

I think the book would be much improved if it provided activities and experiments relevant to the information discussed. It would also be helpful to have a practice test in addition to the questions. Both of these would be more in-depth opportunities for the student to utilize the information and reinforce the material covered.