

Total Cost for Laboratory Material

Live Material	\$ 26.00
Preserved Material	52.00
Microscope Slides	196.90
Initial cost	274.90
Repeated cost	80.00

Names and Addresses of Biological Supply Houses

Carolina Biological Supply Company
Elon College, North Carolina

Edison Scott Squire Company, Inc.
Boyd, Wisconsin

National Biological Laboratories, Inc.

P. O. Box 511, Vienna, Virginia

Turttox General Biological Supply House

8200 South Hoyne Avenue, Chicago 20, Illinois

Ward's Natural Science Establishment, Inc.

P. O. Box 1712, Rochester 3, New York

Ward's of California

P. O. Box 1749, Monterey, California

W. M. Welch Scientific Company

1515 Sedgewick Street, Chicago 10, Illinois

Quivira Specialties Co.

4204 W. 21st Street, Topeka, Kansas



Editor: GEORGE VUKE,
Audio Visual Center, Indiana University

Note: At least three evaluators previewed each film that is reviewed.

SMOKING AND YOU. 12 min., color, no date available, Contemporary Films, Inc.

This film shows smoking as a dangerous, dirty habit, comparing the cigarette with a smoke stack and its associated dirt, soot, and tars. Shows disgusting scenes of dousing a cigarette in the eggs on a breakfast dish and in a coffee cup. A patient with extreme lung damage climbs two steps then frantically gasps for breath. Beakers of tar fill as the narrator tells of the harmful materials breathed in by smokers. Correlates cigarette smoking and lung cancer and throughout the film uses the scare technique of "Look this could happen to you." Some evaluators objected to the extreme cases used while others thought they would shock some of the smokers into another attempt to quit and impress nonsmokers enough so they wouldn't start.

TOO TOUGH TO CARE. 20 min., b/w or color, no date available, Sid Davis Productions.

In contrast to *Smoking and You*, this film uses the humorous, overly dramatic approach. The Finster Cigarette Company tries to keep people smoking in spite of the lung cancer scare. "Get 'em while they're young," is the first approach, so the commercial shows a child of three stuffing cigarettes in his mouth. Parental opposition is too strong, but the sales manager has a brilliant idea, "He smokes because he's too tough to care." The image of the smoker becomes a tattooed, rugged, outdoor individualist. Sales in-

crease, but the film makes the promotion look ridiculous—a jab at the gullible public. Although a humorous film, the hard facts are there, such as the results of the rat tests and the cancer-smoker charts. The concluding statement is that \$300 million is spent annually on cigarette advertising and 40,000 people, all heavy smokers, die from lung cancer yearly. Most evaluators rated this film excellent even though the smoke in the room was thicker at the end of the film than it was at the beginning.

PLANT TROPISMS AND OTHER MOVEMENTS. 11 min., b/w or color, 1965, Coronet.

This is the most complete coverage of plant movements on film to date. It includes the three basic types of movements: tropisms, nastic movements, and nutational movements. Uses the sunflower and rhubarb to illustrate phototropism; the tendrils of a pea plant to show response to touch or contact (thigmotropism); dandelions and tulips, response to light intensity (nyctinasty); mimosa, response to heat (thermonasty); and shock (seismonasty). Also shows how an anaesthetic, such as ether, temporarily renders the plant unresponsive to shock. Nutational movements or responses to internal stimuli are shown by circumnutation. This is a clear, well organized film with excellent visuals, many of which are time lapse. However, it presents a large number of facts and terms which would be difficult to absorb in one continuous showing. Recommended uses would be for introduction or review. The film contains excellent material for "single concept" films; the movements could then be studied more closely. Junior high and senior high biology.

MOVEMENT OF PLANTS. 11 min., color or b/w, 1964, Coronet.

This film introduces the stimulus-response concept by showing the responses of plants to

light, chemicals, moisture, and shock. Controlled experiments show the effects on plant growth of gibberellic acid, light intensity, and moisture: An opening sequence briefly, but not very effectively, explains how time lapse pictures are taken. In addition to the S-R concept and plant behavior, this film could be used for promoting discussion concerning controlled experiments. Intermediate grades.

PROTOZOA: STRUCTURES AND LIFE FUNCTIONS. 17 min., b/w or color, 1965, Coronet.

Uses the light interference microscope and glass models to show representative specimens from the four classes of protozoa: rhizopods, flagellates, ciliates, and sporozoans. It also shows the diversity of structural adaptations of amoeba and other microorganisms for carrying on the life functions of movement, food getting, growth, reproduction, and response to stimuli. Describes protozoa as being part of a basic food chain. An excellent film for the most part; however, some of the scenes are an almost overwhelming rainbow of colors with the colorful backgrounds and the colors produced by the light interference microscope. Also, the scenes of *Volvox* are mediocre. A very useful film in both high school and college biology to introduce the chief characteristics and habits of the four major classes of protozoa.

THE PROTIST KINGDOM. 14 min., color, 1965, Film Associates of California.

This is a slowly paced film which means that the viewer can study most of the scenes without the distraction of a rapid fire narrator. It describes protists as being neither plant nor animal, usually microscopic and with bodies that are not divided into cells. It shows representative specimens of sarcodina, ciliates, flagellates, and sporozoa. Organisms shown are *Amoeba*, *Euplotes*, *Paramecia*, *Stentor*, *Volvox*, slime molds, and bacteria. A good introductory film for ninth and tenth grade biology.

ANNOUNCEMENTS

An eight program TV series scheduled for broadcast in 1966-67 over educational TV stations will feature scientists and their experiments. In each program, the viewer participates vicariously in an experiment performed by the scientist. Two of the experiments have been chosen thus far: "Phagocytosis" featuring Dr. James G. Hirsch of the Rockefeller Institute, and "Shark Attack Patterns" showing the research of Dr. Perry Gilbert of Cornell University. Executive producer is Don Herbert of "Mr. Wizard" renown. "Phagocytosis" is available from Her-

bert's Prism Productions Inc., 220 East 23rd St. N. Y. 10010.

The CBS *National Drivers Test* has been released in b/w, 16mm, sound, omitting commercials. It's approximately 50 min. in length and available for preview from McGraw-Hill, 330 West 42nd Street, New York, N.Y. 10036.

International Indian Ocean Expedition, a new 16mm film presented by the National Science Foundation is available for free loan from Association Films Inc., 347 Madison Avenue, New York, N. Y. 10017. This 28½ minute color film features scientists from 23 nations who work together to chart the topography of the sea. They study ocean sediment, water samples, plankton, and other organisms, classifying them, charting areas of abundance, and determining the factors influencing their survival and growth.

Space Science

Science and mathematics teachers who wish to be placed on a mailing list to receive periodic releases on new developments in space science should write to AFEE-1, NASA Headquarters, Washington, D. C., 20546. Please specify areas of interest.

Chromosomal Abnormalities

A small booklet which explains clearly a few of the diseases in humans that have been traced to abnormal complements of chromosomes is available without charge from the Medical Department, The National Foundation - March of Dimes, 800 Second Ave., New York, N.Y., 10017. The booklet is entitled, *Chemistry Chromosomes and Congenital Anomalies*.

A complete list of publications available through the National Foundation may be obtained from the same address.

Book Reviews

All unsigned reviews were made by Editor.

Botany

AN INTRODUCTION TO PLANT BIOLOGY, 2nd Ed., Dale C. Braungart and Ross H. Arnett, Jr., 420 pp., \$8.50, The C. V. Mosby Company, St. Louis, 1965.

This book is written for beginning students in college botany and has an up-to-date, but rather traditional approach. It is divided into two parts. Part One deals with plant structure and function and Part Two with plant life and evolution. The first chapter and introduction deal with scientific methods, objectives of sci-