Insect Resistance in Crop Plants

Reginald H. Painter

Descries specific accomplishments of insect control by host plant resistance where insecticides are unsatisfactory. Where both insecticides and plant resistance are possible comparative data is given. $5.00

Nature and Properties of Soils, 5th Ed.

T. L. Lyon, H. O. Buckman, N. C. Brady

New illustrations, more simplified explanatory material. Two new chapters, Soil Air & Soil Temperature and Supply & Availability of Phosphorus & Potassium. Other chapters rewritten. June

Pork Production, 3rd Ed.

William W. Smith

Every important aspect & every small detail of the breeding, care, feeding, management, and marketing of hogs are covered in this new revision. Up-to-date. $5.50

Basic Horticulture, Rev.

Victor R. Gardner

Unversally adaptable foundation book presenting principles underlying culture of plants in all parts of country and all climates. Revision features 9 pages of lab exercises, 2 new chapters, & new illustrations. $4.90

The Principles of General Biology

Mary S. Gardiner

A Principles type of book. Broad general review of principles underlying biological concepts and methods. Physiology of function stressed throughout. Most chapters are units in themselves. $5.75

Taxonomy of Vascular Plants

George H. M. Lawrence

Comprehensive source of information on theory, principles, & operating procedures in plant taxonomy plus an accounting of all families of plants of North America. Technical description of each family. $7.95

Parasitism & Symbiosis

Maurice Caullery

Deals with parasitism from point of view of general biology. Makes clear that parasitism, commensalism, and symbiosis are different aspects of same general law. $5.50

Profile of Science

Ritchie Calder

A Study of 4 major scientific advances of our age, of the men who initiated them, and of how and why these men were enabled to do what they did. $3.75

General Biology, 4th Ed.

James W. Mavor

New, up-to-date edition, slightly shorter than its predecessor. Many new illustrations and new sets of questions provided. Laboratory Exercises in General Biology, 4th Ed. accompanies the text. Text—$3.75; Manual—$3.50

Wandering Albatross

Harrison Matthews

Vivid, sea-flavored account of author's knowledge of the albatross, its odd nesting habits, its mating dance, etc. Salty anecdotes of men and ships. $3.00

An Introduction to Acarology

E. W. Baker & G. W. Wharton

Comprehensive study of biology of acarina and significance of various species to medicine, public health, and agriculture. From information given, reader can identify particular mites & ticks. $10.00

Introductory Animal Husbandry, Rev.

Arthur L. Anderson

In revision, livestock numbers brought up-to-date as well as livestock receipts. Schedules on market classes and grades, and data on meat production and consumption revised. All charts include timely information. $6.00

60 Fifth Ave. THE MACMILLAN COMPANY New York, N.
A COMPLETELY NEW INSTRUMENT — An ADVANCE in DIRECT READING ANALYTICAL BALANCES

Now, for the first time... the SPEED of the fastest projection balance combined with ACCURACY exceeding the standards required of the finest analytical balances.

VOLAND Universal BALANCE

Actually TWO Balances in ONE

- A high speed projection balance with superior stability reading to 0.1 milligram.
- Analytical balance readings to 0.01 milligram by means of a simple sensitivity shift, exceeding the standards of the finest analytical balances available.

The only analytical balance in which dual sensitivity is provided, producing a sensitivity 10 times that found in conventional projection balances. Weighs in seconds... weighings to the fourth decimal place obtained literally in seconds by straight projection, or to the fifth decimal place by sensitivity shift, and an additional decade of weights.

All weights up to 200 grams are built into the balance and are obtained by manipulating five selector knobs. Speed is gained by projection reading, eliminating need for weights in lower ranges.

Spacious cabinet allows samples to be placed easily and removed. Weights can be readily lifted out of their supporting members for recalibration or cleaning.

A new and superior standard of speed, accuracy and convenience. Fully meets all the technological requirements of modern laboratory usage.

Order now for September Delivery

Cat. No. 14130 .................. $895.00

7 Important Design Advances

1. Built-in sensitivity shift mechanism for routine or highest precision weighings.
2. New secondary device for obtaining the lower range of weights at the sensitivity of 0.01 milligrams.
3. A vibration-free projection system with unusual zero stability.
4. A new high-strength beam with individually adjustable knife mounts.
5. The only fully compensating stirrups of American manufacture.
7. Design of hanger permitting maximum space for handling samples.

STANDARD SCIENTIFIC SUPPLY CORP.
34 West 4th Street

New York 12, N. Y.

June 27, 1952
DENTAL CARIES and FLUORINE

7½ x 10½, clothbound, double column, XI + 111 pages

FROM THE CONTENTS:

H. Trendley Dean
Epidemiological Studies in the United States
Robert Weaver
Epidemiological Studies in the British Isles and India
T. Ockers
Fluorine and Dental Caries in South Africa
Philip Jay and
Chemical Differences of Caries Susceptible and Immune Teeth
Francis A. Arnold, Jr.
Experimental Caries and a Discussion of the Mechanism of Caries
T. Ockerse
Inhibition by Fluorine
Wallace D. Armstrong
Topical Applications of Fluorides as a Method of Combating Dental Caries
Philip Jay
The Possibility of Reducing Dental Caries by Increasing Fluoride Ingestion
Harold C. Hedge and
Fluorine and the Public Water Supply
Wallace D. Armstrong
Nondental Physiological Effects of Trace Quantities of Fluorine
Francis A. Arnold, Jr.
Abel Wolman
DENTAL CARIES AND FLUORINE

Published in 1946, this volume is attracting increasing attention today. $3.50—Cash order price to AAAS members $3.00

TO: AAAS, 1515 Mass. Ave., N.W.,
Washington 5, D. C.
Name ...........................................
Address ...........................................
City .......... Zone ... State ..........

PITUITARY-ADRENAL FUNCTION

published February 1951
2nd printing June 1951

6 x 9 inches, illustrated, clothbound, 224 pages—$4.00
Price to AAAS members for prepaid orders—$3.50

PITUITARY-ADRENAL FUNCTION continues the AAAS tradition of presenting in book form the collected papers presented at symposium programs of wide interest. This volume includes 22 papers delivered at a two-day Symposium on the Adrenal Cortex at the AAAS meeting in New York City, December 1949.

PITUITARY-ADRENAL FUNCTION assembles important contributions of a score of laboratories in the United States and Canada from which many of the recent major advances in pituitary-adrenal physiology and therapeutics have come, and includes studies on the regulation of adrenal cortical activity, the role of the cortical hormones in protein, carbohydrate, and mineral metabolism, and effects of the cortical steroids and the ACTH in various disease states. A summary chapter on "Adrenolescence" by Dr. George Perera forecasts some of the possible future trends in this active field of endocrine research.

TO: AAAS PUBLICATIONS
1515 Mass. Ave., N.W., Washington 5, D. C.

Enclosed is $............ Please accept my order for

for ............ copies of

PITUITARY-ADRENAL FUNCTION

Name ...........................................
Address ...........................................
City .......... Zone ... State ..........

ORDER NOW
IMPORTANT NEWS
FOR RADIOISOTOPE USERS

For the past year, laboratories of Radioactive Products, Inc. have been fully engaged under contract in the synthesis of such specialized ring-labeled C¹⁴ compounds as Cholestenone, Cholesterol, and Testosterone.

We are pleased to announce, however, that previous commitments have now been fulfilled and that the following compounds can, in most cases, be shipped from stock:

NEW LABELED COMPOUNDS NOW AVAILABLE

<table>
<thead>
<tr>
<th>Compound</th>
<th>Specific Activity</th>
<th>Min. Order</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholestenone</td>
<td>5.0 uc/mg</td>
<td>1 mg</td>
<td>$ 50/mg</td>
</tr>
<tr>
<td>4-C¹⁴ (Ring A)</td>
<td>1 mg</td>
<td>$ 65/mg</td>
<td></td>
</tr>
<tr>
<td>Cholesterol</td>
<td>5.0 uc/mg</td>
<td>1 mg</td>
<td>$ 50/mg</td>
</tr>
<tr>
<td>4-C¹⁴ (Ring A)</td>
<td>1 mg</td>
<td>$ 65/mg</td>
<td></td>
</tr>
<tr>
<td>Testosterone</td>
<td>5.0 uc/mg</td>
<td>1 mg</td>
<td>$ 50/mg</td>
</tr>
<tr>
<td>4-C¹⁴ (Ring A)</td>
<td>1 mg</td>
<td>$ 65/mg</td>
<td></td>
</tr>
<tr>
<td>Methyl Iodide C¹⁴H₅I</td>
<td>2.0 mc/m mole</td>
<td>1 mc</td>
<td>$285/mc</td>
</tr>
<tr>
<td>Methyl Alcohol C¹⁴H₅OH</td>
<td>2.0 mc/m mole</td>
<td>1 mc</td>
<td>$250/mc</td>
</tr>
</tbody>
</table>

As research continues, steroids and other similar compounds will also become available. Knowledge of your requirements can speed their availability. A letter stating them will receive prompt attention.

RADIOACTIVE PRODUCTS, INC.
435 W. CONGRESS
DETROIT 26, MICHIGAN

YOU can TELL and SELL over 32,000 top scientists here . . . at a very low cost.

Your sales message in an ad this size costs only $35.00 at the one-time rate—less for multiple insertions. And the results!—well, here's what one of the many satisfied advertisers in SCIENCE has to say . . .

"SCIENCE is consistently our most profitable medium. Business secured solely thru SCIENCE ads has been the backbone of our success in this field."

Prove to yourself the effectiveness of SCIENCE in increasing your Market, Sales, and PROFITS—send your "Copy" NOW—or write for further information and Rate card No. 27B.

SCIENCE weekly reaches over 32,000 top scientists
1515 Mass. Ave., N.W., Wash. 5, D. C.

LABORATORY SERVICES
in Biochemistry, Chemistry, Bacteriology
and Insecticide Testing
Mineral determinations including sodium and fluorine
Proximate analyses
Vitamin and amino acid assays
Food biochemistry and microbiology
Write for price schedule

WISCONSIN ALUMNI RESEARCH FOUNDATION
P. O. BOX 2059 • MADISON 1, WISCONSIN

FARRAND OPTICAL CO., Inc.
BRONX BLVD. AND EAST 238th STREET • NEW YORK 70, N. Y.

"an infinitely dependable instrument"
... a statement repeatedly substantiated by Scientists whose names will gladly be furnished on request.

Provides stability and linear response over a wide range of sensitivities for measurements of extremely low concentrations in Micro or Macro volumes of solution.

Suitable for all fluorometric methods of analysis: Thiamin, Riboflavin, Estrone, Estradiol, Folic Acid, Benzyopyrene, Atabrine, Porphyrins, Chlorophyll, drugs, oils, metal complexes, organic and inorganic compounds, etc.

BULLETIN #803 on request

PRECISION OPTICS, ELECTRONIC AND SCIENTIFIC INSTRUMENTS

June 27, 1952
YOUR ad here reaches over 32,000 foremost scientists in the leading educational institutions, industrial laboratories, and research foundations in the U. S. and 76 foreign countries—at a very low cost

**POSITIONS WANTED**

Bacteriologist and Virologist; woman, recent Ph.D., desires responsible research position. Several years research experience. Publications. Box 241 SCIENCE.

Internist, Diplomate; three years, instructor (biochemistry, physiology); four years, associate professor of medicine and pharmacology, and director research, university medical school. For further information, please write Science Division, Medical Bureau (Burneice Larson), Palmolive Building, Chicago.

Pharmacist; B.S. in Pharmacy, graduate work in manufacturing pharmacy, good background in industrial engineering and business. Box 239 SCIENCE.

Pharmacist; Ph.D., M.D., married, 37, Seven years teaching experience. Desires teaching and research in University, or research position in industry. Box 238, SCIENCE.

Zoology, Physiology, Entomology; broad training (Ph.D.), including nine years in Physiological research (eighteen publications). Eight years of college teaching. I am now a teaching-research professorship carrying remuneration commensurate with my abilities. Asst Prof. Sam C. Munson, George Washington University, Washington, D. C.

**SOIL SCIENTIST**

Ph.D., 12 years experience in most phases of soils work; plant production, disease control in Central American and Caribbean areas. Desire research work in field of agriculture with industrial company or public agency. Box 242, SCIENCE.

**POSITIONS OPEN**

Bacteriologist and Virologist; woman, recent Ph.D., desires responsible research position. Several years research experience. Publications. Box 241 SCIENCE.

**SCIENTISTS**—salaried positions, $3,600 to $25,000. This confidential service for outstanding men who desire a change of connection, will develop and conduct preliminary negotiations without risk to present position. Send name and address for details.

**MATHMATICIANS**

**PHYSICAL SCIENTISTS (All Levels)**

**INTERESTED IN WELL PAID CAREER IN OPERATIONS RESEARCH**

Opportunity to work (in Washington) with oldest established group in country.

Write Box 243, SCIENCE, for particulars.

**LANGUAGES**

It's Quick, Easy, Fun to Learn a Language by LINGUAPHONE

At home learn to speak Spanish, French, German, Russian, Japanese—any of 20 languages by Linguaphone. Save time, work, money. *Send for FREE book today.*

Approved for VETERANS' Training

LINGUAPHONE INSTITUTE 8456 Radio City, New York 20

**SUPPLIES AND EQUIPMENT**

**LOVING INSTRUMENTS**

No. 201-450-150 Micro-Slide

**FIELD FINDER**

LOVING ENGINEERING COMPANY

SILVER SPRING, MD.

20% discount on all LP records. Postage free in U.S. Full guarantees. Write for free complete catalog. MAILORDER RECORD COMPANY, 6349 North Western Avenue, Chicago 45, Illinois—Room 211S.

June 27, 1952
The MARKET PLACE

BOOKS • SERVICES • SUPPLIES • EQUIPMENT

BACK NUMBER PERIODICALS — Bought and Sold
Tell us what you want! — What have you to offer?
Abrahams Magazine Service
DEPT. P, 56 E. 13th ST.
NEW YORK 3, N. Y.

SCIENTIFIC BOOKS and PERIODICALS WANTED
Complete libraries — Sets and runs — Single titles
Also, please send us your want lists.
STECHERT-HAFNER, INC.
31 East 10th St., New York 3

Your sets and files of scientific journals are needed by our library and institutional customers. Please send us lists and description of periodical files you are willing to sell at high market prices. Write Dept. A5, J. S. CANNER, INC.
Boston 19, Massachusetts

PROFESSIONAL SERVICES

GLASS BLOWING by Experts
According to Specifications for chemical, medical, industrial RESEARCH LABORATORIES.
Accurate and Fast Service
LABORATORY GLASS SUPPLY CO. • 610 W. 150th St., New York 31, N. Y.

New Food Ingredients • New Drugs
ANIMAL TESTS
Analyses — Consultation — Research
LaWall & Harrison

LOOKING FOR A PUBLISHER?
Write for Free Booklet SC telling how we can publish your book. All subjects considered. New authors welcome.
VANTAGE PRESS, Inc. • 230 W. 41 St., New York 36.
In Calif.: 6356 Hollywood Blvd., Hollywood 28

STAINS

STARKMAN Biological Laboratory
561 Bloor St., W.
Toronto, Canada

For CONSISTENT Rats . . .

BUDD MT. RODENT FARM

CHESTER, N. J.

Breeder of a recognized strain of Wistar.

PARASITOLOGICAL PREPARATIONS

• high quality — low priced. Write for catalog

TROPICAL BIOLOGICALS •

P. O. Box 2227, San Juan, Puerto Rico.

LABORATORY ANIMALS

Clean healthy well-fed animals
Guaranteed suitable for your needs.
Reasonably priced — Dependable service

DL-GLYCLERALDEHYDE

CONCORD LABORATORIES • 292 Main St. Cambridge 42, Mass.

All AMINO ACIDS

natural, synthetic, unnatural,
Rare Sugars, Biochemical Products, Reagents, New Pharmaceuticals in stock. Write or phone Plaza 7-8171 for complete price list.

BIOS LABORATORIES, INC. 17 West 60th St.
New York 23, N. Y.

NEW and USED SCIENTIFIC EQUIPMENT:

Microscopes, Refractometers, Colorimeters, Microprojectors, Bal-
nances, etc. Reconditioned instruments fully guaranteed. Liberal trade-in allowance on your old equipment. Repairs of all laboratory instruments; also custom building. Write for estimates.

W. H. HARTMANN, 1508 Divisadero, San Francisco 15, Calif.

C. P. AMINO ACIDS and Peptides
for immediate delivery
H. M. CHEMICAL CO., LTD.
1651 — 18th St.
Santa Monica, Calif.

Continuous Controlled Irradiation of Biological Systems

QUANTUM, INC.
Consultation — Equipment — Processing
Mt. Carmel Station, Hamden, Conn.
Now, you can order carbon 14 labeled sugars and algae from NUCLEAR stock in the quantities you require! Many other compounds are available on special order. Cost is low, and time-consuming compound preparation is eliminated.

NUCLEAR'S new biosynthetic process assures compounds of the highest purity, giving you maximum control in metabolism or tracer studies—wherever you choose to explore. Controlled production maintains purity and activity level of all compounds to assure correct assay wherever used.

NUCLEAR'S special introductory 40mg. package of d-glucose, with an activity of approximately 50,000 disintegrations per minute per mg., is $17.50. No AEC authorization is required, but only one package can be shipped per order.

### Nuclear Chemicals...C\textsuperscript{14} Labeled

#### Available from Stock

<table>
<thead>
<tr>
<th>Compound</th>
<th>Price/100 microcuries</th>
</tr>
</thead>
<tbody>
<tr>
<td>sucrose</td>
<td>$89.00</td>
</tr>
<tr>
<td>d-glucose</td>
<td>195.00</td>
</tr>
<tr>
<td>d-fructose</td>
<td>175.00</td>
</tr>
<tr>
<td>algae (chlorella)</td>
<td>39.00</td>
</tr>
</tbody>
</table>

(Specific activity 0.5 microcuries per milligram)

#### Available on Special Order

(Prices on request)

<table>
<thead>
<tr>
<th>Sugars or algae</th>
<th>Fructose Phosphates*</th>
</tr>
</thead>
<tbody>
<tr>
<td>of higher specific activity</td>
<td>Glycosides</td>
</tr>
<tr>
<td>Digitalis</td>
<td>Acetyl Glucose</td>
</tr>
<tr>
<td>Digitoxin</td>
<td>Barium Carbide</td>
</tr>
<tr>
<td>Chlorophyll</td>
<td>Acetylene</td>
</tr>
<tr>
<td>Carotene</td>
<td>Trichloroethylene</td>
</tr>
<tr>
<td>Amino Acids</td>
<td>Chloroform</td>
</tr>
<tr>
<td>Fatty Acids</td>
<td>Other Compounds from biological or organic synthesis</td>
</tr>
<tr>
<td>Glucose Phosphates*</td>
<td></td>
</tr>
</tbody>
</table>

*Either C\textsuperscript{14} or P\textsuperscript{32} labeled

---

**Nuclear Instrument & Chemical Corporation**

237 West Erie Street • Chicago 10, Illinois • Cable Address: Arlab, New York

Western Office: 1063 Colorado Blvd., Los Angeles 41, California

Export Department: 13 E. 40th St., New York 16, New York

---

- Scaling Units for Every Type of Radiation Counting
- Complete “Packaged” Counting Systems
- Health Monitoring Instruments for Personnel Protection
- Complete Line of Accessories for the Nuclear Laboratory

**Nuclear Precision Instrumentation for Nuclear Measurements**
WITH this ideal permanent set-up you're instantly ready for any visual or photomicrographic work. Just clamp microscope and illuminator to the AO Photomicrographic Camera base. A Special light-tight adapter and camera arm with fine adjustment positioning stop enable you to swing the camera away from the microscope and back without further adjustment. A binocular body can be used for extended observations and easily replaced by a monocular body when you take photomicrographs. The telescopic focusing eyepiece permits viewing moving specimens up to the instant the shutter is released. At a moment's notice you can switch from the camera back for 35mm black and white or color shots to the 4" x 5" unit for sharp photomicrographs suitable for technical journal reproduction. See your AO distributor or write Dept. F4.

★ 360° REVOLVING BODY—No revolving stage needed.
★ TAKES A 35MM FILM, 4" x 5" PLATES, CUT FILM, OR FILM PACK.
★ RUBBER VIBRATION ABSORBERS.
★ GROUND GLASS WITH TRANSPARENT STRIPS—For critical focusing by magnifier.
★ COMPENSATING LENS IN 35MM CAMERA—Matches field to 4" x 5" camera.
★ MICROSCOPE AND ILLUMINATOR—May be clamped in any of 3 positions.