

New Books

Introduction to Agronomy

By R. S. DUNHAM. The Dryden Press, New York, N. Y. 1957. 324 pages. Reviewed by WYNNE THORNE, Utah State University, Logan, Utah.

"INTRODUCTION TO AGRONOMY" is truly introductory in nature. The presentation is brief and highly readable. It fulfills the expressed purpose of orienting the reader in the field of agronomy and should be successful in arousing interest.

The presentation consists more of a sampling of information than of an orderly presentation of facts or principles. For example, in the 30 pages covering the field of soil science, almost a third of the space is devoted to controversies involving organic vs. mineral fertilizers and agrobiolgy. In the reviewer's opinion there seems to be an omission of general principles that would prepare the student to solve practical problems or to resolve controversies of the type presented. Obviously the book is designed for extensive supplementation by the instructor. This brevity is the strength or weakness of the book depending on the viewpoint of the reader or instructor. The claim that the book is for the advanced student as well as for the one seeking orientation will probably not be widely appreciated.

The book's 13 chapters are divided into four sections: crops, soils, production factors, and production hazards. The section on crops includes a brief introduction to plant classification and short chapters on forage crops, cereal crops, and special crops. The production factors section includes seeds and seedlings, crop rotations, water, and light and temperature. Some other factors such as fertilizers, liming, and tillage are mentioned in the chapter on soils. The production hazards singled out for discussion are diseases, insects, and weeds.

Each chapter is accompanied by a list of selected references, mostly of a general nature. The discussion presented is intended to stimulate more intensive reading from the references.

The book is illustrated with many well chosen photographs and simple tables. In some instances, e.g., water relations of plants, data could have been taken from better controlled experiments to provide evidence on points in question. The index is good.

Those seeking a brief outline of the field of agronomy together with selected references for use in more

intensive studies of special areas will find this book well suited to their needs.

LITERATURE AVAILABLE

Chemical Catalog. Over 4000 chemicals listed in 1957 catalog. List includes fine organics, inorganic reagents, indicators, and certified biological strains. Dept. A&F, MATHE-SON, COLEMAN & BELL, 2909 Highland, Norwood 12, Ohio, or East Rutherford, N. J.

Dust Control. An 8-page bulletin illustrates and describes optical and electronic systems of portable air pollution photometer for measuring and controlling outdoor and indoor air pollution. Indoor applications include monitoring and control of dust-free workrooms. Listed are applications, sensitivities, ranges, and other engineering data. Copies of Bull. JM-1000-C may be obtained from Dept. A&F, PHOENIX PRECISION INSTRUMENT Co., 3803-05 N. Fifth Ave., Philadelphia 40, Pa.

Gravimetric Feeder. Belt type gravimetric feeder designed for continuous, high-capacity feeding and weighing processes described in colored, four-page bulletin. Machine feeds over 3000 lb. per minute. For further information write for Bull. 35-N62. Dept. A&F, OMEGA MACHINE Co., 345 Harris Ave., Providence, R. I.

Monosodium Glutamate. Booklet, "The Value of Glutamate in Processed Meat and Poultry," available from Dept. A&F, Information Service, GLUTAMATE MANUFACTURERS' TECHNICAL COMMITTEE, 214 Front St., San Francisco 11, Calif.

Nitrogen Generator. Chemical and food manufacturers can use this nitrogen generator, with wide controlled-hydrogen-content range, developed to produce oxygen-free nitrogen from ammonia in their own plants. Brochure on Nitroenal generators will be sent to persons requesting it on company letterhead. Write Dept. A&F, BAKER'S INSTRUMENT DIVISION, 207 Grant Ave., East Newark, N. J.

Protective Linings and Coatings. Brochure discusses types of protective linings and coatings, and how and when they should be applied. Section on porosity explains what it is, how it can be determined, and what to do about it. Suitability of a protective system to its environment dis-

cussed. For complete details, write Dept. A&F, PROTECTIVE COATINGS DIVISION, METALWELD, INC., Scotts Lane & Abbotsford Rd., Philadelphia 29, Pa.

Refractometers. Bulletin describes eight new refractometers for use in laboratory, pilot plant, and process control. Lists applications, sensitivities, ranges. Bulletin R 1000 obtainable from Dept. A&F, PHOENIX PRECISION INSTRUMENT Co., 3803-05 N. 5th St., Philadelphia 40, Pa.

Rotary Batch Blender. Illustrated brochure gives specifications of nine models of blenders, and shows how rotary drum design saves plant space, including headroom. Sectional view points out how stuffing box and packing seal accomplishes dustless operation. All bearings on outside of drum, and no product contamination is possible. Brochure BL-157 available from Dept. A&F, STURTEVANT MILL Co., Park & Clayton Sts., Boston 22, Mass.

Safety Manual. Pocket-size, fully illustrated, manual covers accident prevention, first aid, fire prevention, safety equipment, and the handling of radioactive materials. Request "Manual of Laboratory Safety," Dept. A&F, FISHER SCIENTIFIC Co., 308 Fisher Bldg., Pittsburgh 19, Pa.

Vibrating Screen Separators. Illustrated catalog presents operating and application data on Sweco vibrating screen separators used for the separation of solids from liquids and the screening of all types of dry materials. Ask for Bull. No. S-56-1, Dept. A&F, SOUTHWESTERN ENGINEERING Co., 4800 Santa Fe Ave., Los Angeles 58, Calif.

Volumetric Feeder. Machine designed to feed any dry material (lumps or fine powder, light or heavy material) dependably and accurately over a 40 to 1 adjustable feed range. Various models, design features, principles of operation, and allied accessories described in 8-page, colored bulletin. Write for Bulletin 20-P2, Dept. A&F, OMEGA MACHINE Co., 345 Harris Ave., Providence 1, R. I.

Wet Screening Equipment. The Dorr-Oliver DSM Screen for wet screening nonfibrous slurry feeds, described in four-page folder. Bull. 2300, Dept. A&F, DORR-OLIVER, INC., Barry Place, Stamford, Conn.