

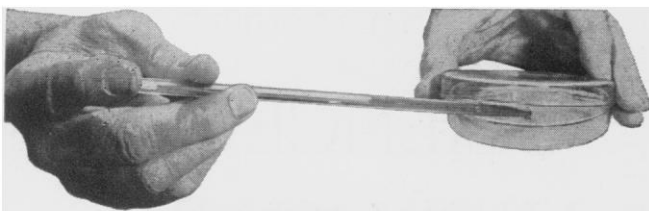
Vol. 10 June 1959 Approx. 492 pages

ANNUAL REVIEW OF PLANT PHYSIOLOGY

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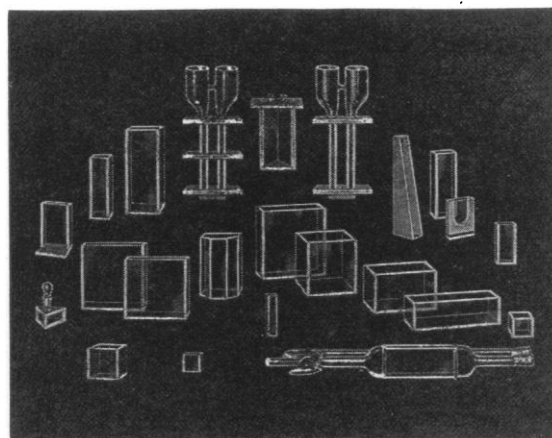
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New Products

The information reported here is obtained from manufacturers and from other sources considered to be reliable, and it reflects the claims of the manufacturer or other source. Neither Science nor the writer assumes responsibility for the accuracy of the information. A coupon for use in making inquiries concerning the items listed appears on page 1630.

■ **CORE TESTER** for automatic grading of ferrite memory cores 0.080 in. in diameter operates at a maximum rate of 3600 cores per hour. The tester provides for separation of the tested cores into five grades. The core to be tested is automatically positioned to be carried into two sets of contacts. Programmed pulses are applied to the core by one set of contacts, while the second set picks up induced voltage output. The response can be examined by the operator or by an automatic decision-making circuit. (Rese Engineering Inc., Dept. 854)

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■ **LABORATORY CHEMICAL CATALOG** of British drug houses provides 336 pages of information about 6500 organic and inorganic chemicals, solutions for analytical use, indicators, microscopical stains, resins, dyes, and so forth. (Ealing Corp., Dept. 863)

■ **PRESSURE TRANSDUCER** that converts pressure to frequency combines a reactance-controlled subcarrier oscillator and a single-coil, variable-reluctance pressure pickup. The oscillator and pickup are closely matched, and nonlinearity does not exceed ± 1 percent. Since the pressure-sensitive diaphragm is the only moving part, the transducer is resistant to shock vibration and acceleration. (Ultradyn, Inc., Dept. 866)

■ **POWER SUPPLY** provides output from 500 to 2500 v at 0 to 10 ma d-c. Polarity is reversible, and current and voltage meters are provided. Regulation against line voltage fluctuations is said to better than ± 50 parts per million, ripple less than 10 parts per million, and load regulation better than ± 60 parts per million over the entire output range. The instrument uses printed circuits. (NJE Corp., Dept. 873)

■ **PULSE-HEIGHT ANALYZER** consists of a single-channel analyzer containing a non-overloading linear amplifier, an electronic sweep-count-rate-meter, a high-voltage supply, and a strip-chart recorder. The electronic sweep circuit is used to scan the spectrum between any two predetermined levels from 0 to 85 v. The scan is performed automatically; after each scan the device resets and repeats the cycle. An automatic sample-changer accessory can be used to change the sample at the time of reset. (Radiation Instrument Development Lab., Inc., Dept. 869)

■ **DIFFERENTIAL TRANSFORMERS** are able to operate continuously at 1000°F and to withstand 2000°F for periods up to 5 min. The two models available are designed to measure displacements up to ± 0.150 and ± 0.500 in. respectively. Coils are wound on ceramic bobbins, and leads are terminated on lugs. Lead wires are up to 3 ft long. (Automatic Timing & Controls, Inc., Dept. 864)

■ **PENETRATION TESTER** determines the sizing of a paper sample by photoelectric measurement of light reflectance from the sample during penetration by

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a test liquid. The time required for the test liquid to penetrate to the point where reflectance is reduced to a predetermined percentage of its original value is measured. (Thwing-Albert Instrument Co., Dept. 868)

■ **TEST OSCILLATOR**, with all-transistor circuitry, provides eight preset frequencies, specified by the customer, between 50 cy and 150 kcy/sec and selectable by pushbutton. The instrument is portable and is powered by nine 1.3-v mercury

batteries. The circuit is of the Wien bridge type. Amplitude control is accomplished with delayed automatic-gain-control voltage fed back to a regulator circuit. Frequency accuracy is ± 1 percent, and level stability with frequency change is ± 2 percent. Maximum output is 2.0 v r.m.s. and 5.00 ma r.m.s. Distortion is less than 1 percent from 100 cy to 110 kcy/sec and less than 2 percent from 50 cy to 150 kcy/sec. (Consolidated Electrodynamics Corp., Dept. 883)

■ **LIQUID FEEDER** meters liquid chemicals at flow rates from 0.1 to 4 gal/day into a liquid stream. The device includes a built-in ejector, a corrosion-proof plastic body, and a porous stone through which the chemical is fed. The liquid must be free of suspended solids and must be sufficiently transparent to permit the scale of the device to be seen. (Fischer and Porter Co., Dept. 870)

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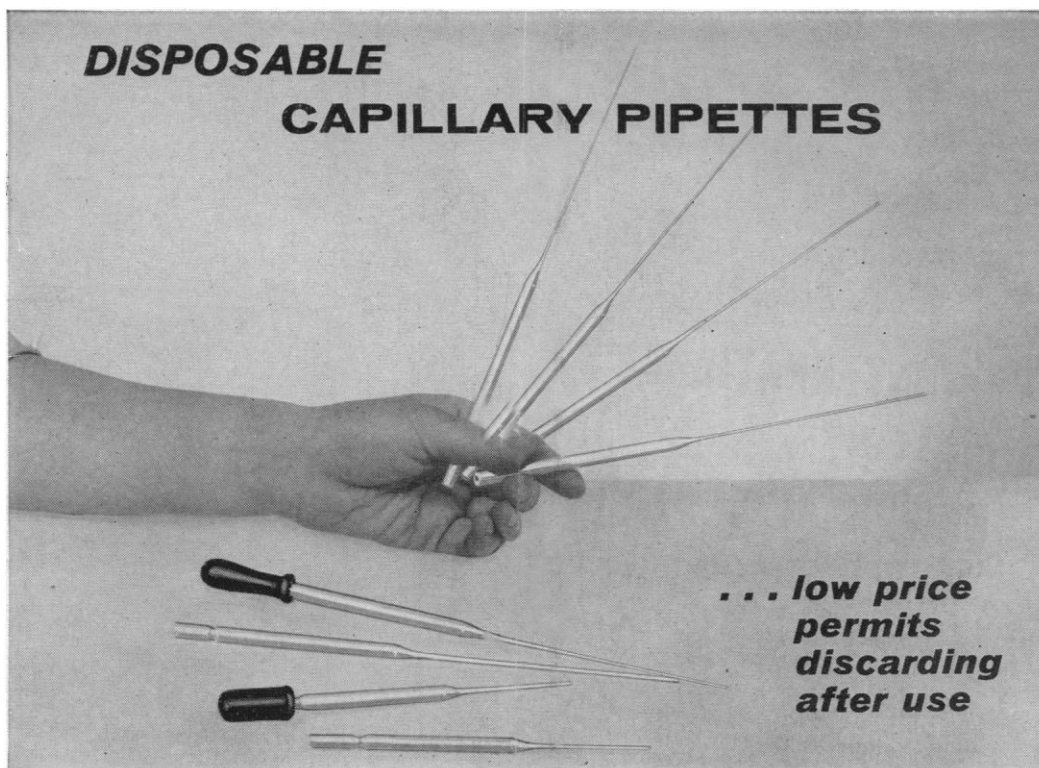
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