# SCIENCE

Vol. 81

FRIDAY, FEBRUARY 15, 1935

No. 2094

The American Association for the Advancement of Science: A Taxonomist's Experience with Hybrids in the Wild: DR. KARL M. WIEGAND	161	Scientific A Glas DR. W tion: J
Obituary: Roland Burrage Dixon: DR. E. A. HOOTON. Re- cent Deaths Scientific Events: Acquisitions of the British Natural History Mu- seum; A Nutritional Study of Belgian Unemployed; Proposed State Forests in Massachusetts; Com-	. 166 - ;	Special 2 A Synt teinase and Jo of the lation: Peptido
Relief for State Forests in Massachusetts; Com- mittee on Unemployment and Relief for Chemists and Chemical Engineers; Anthropologists and the Federal Indian Program		Science SCIEN ment of Science Science
Discussion: Film-Strip Copies of Scientific Publications: DR. ATHERTON SEIDELL. Origin of Petroleum: DR. BENJAMIN T. BROOKS. Are Fishes the Principal Source of Petroleum?: PROFESSOR JUNIUS HEN- DERSON	174	N Lancaste Annual S SCIEN( tion for t
Scientific Books: Physical Thought: Professor Bergen Davis	177	ing mem the office Institutio

#### s Assembly for Seitz Bacteriological Filters: ILLIAM F. BRUCE. A Simple Glass Connec-179 J. B. FICKLEN ... Articles: thetic Peptide as Substrate for Tryptic Pro-: DR. MAX BERGMANN, LEONIDAS ZERVAS The Electrical Response SEPH S. FRUTON. Vestibular Nerve During Adequate Stimu-The Special Reactivity of O. H. MOWRER. 180 es: DR. BEN H. NICOLET 6 News

Apparatus and Laboratory Methods:

SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. MCKEEN CATTELL and published every Friday by

#### THE SCIENCE PRESS

New York City: Grand Central Terminal Lancaster, Pa. Garrison, N. Y. Annual Subscription, \$6.00 Single Copies, 15 Cts. SCIENCE is the official organ of the American Association for the Advancement of Science. Information regarding membership in the Association may be secured from the office of the permanent secretary, in the Smithsonian Institution Building, Washington, D. C.

# A TAXONOMIST'S EXPERIENCE WITH HYBRIDS IN THE WILD<sup>1</sup>

By Dr. KARL M. WIEGAND

CORNELL UNIVERSITY

IT is with much trepidation that I approach this subject in an audience that is doubtless more deeply informed on the recent phases of genetics than I. The only justification for such audacity is that possibly some of the observations from another angle may supplement the splendid work of modern students in that now highly specialized field. I shall not attempt, however, a very deep genetical discussion of the observations made.

In his every-day experience with plants in the field the taxonomist is accustomed to think of the species in certain groups as clear cut and easy to work with, while other groups are difficult and the species more or less confused with no sharp boundaries. Much thought has been given at different times to the ques-

<sup>1</sup> Address of the retiring vice-president and chairman of the Section for the Botanical Sciences, American Association for the Advancement of Science, Pittsburgh, December, 1934. tion as to why there is this difference between groups and what is its true phylogenetic significance. Long ago, among the special creationists there seemed to be no explanation other than that at the moment of creation the plans for these difficult groups had not been sufficiently worked out and perfected. Following the general acceptance of the theory of evolution, it seemed that in certain groups, species were perhaps in the making, through active variation, with the lines not clearly drawn as yet by natural selection. The more confused groups were therefore the newer groups. There still seems much reason for thinking this to be true in a general way.

That hybridity played any important part in causing the difficulty of species delineation in these groups was given little attention and rarely if ever suggested. The occurrence of hybrids in the wild was, in those days, thought to be a rather rare occurrence. In

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