

*Phytopathologische Zeitschrift*. Edited by E. Schaffnit in collaboration with Appel (Berlin-Dahlem), Brierley (Harpenden), Foëx (Paris), Gassner (Braunschweig), Gäumann (Zurich), Jaczewski (Leningrad), Klebahn (Hamburg), Liro (Helsinki), Müller (Angora), Naumov (Leningrad), Petri (Rome), Hemmi (Kyoto), and Westerdijk (Baarn); 1 to 2 volumes appearing each year, each volume consisting of 6 issues; published by Paul Parey, Berlin. 1929—.

The "Phytopathologische Zeitschrift" represents a continuation of the "Forschungen auf dem Gebiet der Pflanzenkrankheiten und der Immunität im Pflanzenreich," brought to a close with the fifth issue at the end of the year 1928. In the publisher's announcement the new periodical is described as resting upon an international foundation—and this description has been substantiated tolerably well by the first volume, which appeared in 1929, as well as the several parts of the second volume already published. For, although of the twenty-three papers contained in the first volume, only two are in French and only one is English, the disproportion in favor of German is pronounced more in respect to language than to source, inasmuch as of the twenty remaining papers not more than eleven are referable to German laboratories, four of the other nine written in German having had their origin in Russian, two in Dutch, two in Swiss, and one in Italian establishments. The German displayed in the articles contributed from outside the German-speaking regions shows little or nothing in the way of obviously alien peculiarities. However English-speaking readers may perchance find some refreshing enjoyment in the novel though sometimes fetching expressions to be encountered in the one article appearing in their language.

For the most part the papers in the first volume of the "Zeitschrift" are expressive of the more intensive type of investigation which, especially during the last two decades, has provided increase both in fundamental knowledge and in economic mastery. Among subjects dealt with may be mentioned, for example, the effect of carbon dioxide on development of rust, the breeding of wheat for resistance to stripe rust, the varietal response of wheat and oats to stripe rust and loose smut, respectively, the physiologic races of stem rust, the influence of fertilizers on the susceptibility of plants to disease, the pathological effect of virus diseases on cell structure, and the biochemistry of potato-tuber rot caused by late blight. Yet, the older aspects of plant pathology have not been neglected. At least three papers are devoted primarily to the description of various parasitic fungi, one paper deals at some length with the phylogeny of fungi, another is devoted to the description of a new bacterial disease of chicory and the organism responsible for it, and still another discusses the bacteria associated with clubroot.

The new journal is put up in excellent form, the paper being of good quality, the type clear, and the margins sufficiently but not unnecessarily wide. The half-tone reproductions of photographic originals, as well as the colored plates, are of uniformly high merit. The drawings are always well reproduced, whether, as fortunately must often have been the case, the originals were carefully executed, or whether, as evidently was true in other instances, the somewhat cavalier draftsmanship of the contributor can hardly have promised an edifying end product. All in all, the periodical well deserves the place in the front rank of scientific publications which apparently it already occupies. That it will be found in all libraries serving the needs of plant pathologists may be taken for granted. I predict, however, that copies in lending libraries will be out much too frequently to be immediately available and that the active worker will find such measure of comfort in having a complete set on his own shelf as will repay him many times over for the outlay of the rather high, though according to European standards, not excessive price of subscription.—CHARLES DRECHSLER, Bureau of Plant Industry, Washington, D. C.