

Letter to the Editor

## Nomenclature of Races of *Puccinia helianthi* and Designation of Genes for Rust Resistance in Sunflowers

W. E. Sackston and N. V. Rama R. Urs

Emeritus professor of plant pathology, Department of Plant Science, Macdonald College of McGill University, Ste. Anne de Bellevue, Quebec, Canada, H9X 1C0, and plant pathologist, Dahlgren and Co., 1220 Sunflower St., Crookston, MN 56716.  
Accepted for publication 6 September 1989 (submitted for electronic processing).

The April 1989 issue of *Phytopathology* carried an article by Yang et al (3). The acknowledgments expressed appreciation to several people, including Rama R. Urs and W. E. Sackston, for "suggestions during the preparation of the manuscript." We did not see the manuscript prior to its publication and are concerned about the inclusion of our names.

Yang and Luciano, like us, were members of an ad hoc international sunflower rust committee that met at Frederick, Maryland, September 29-30, 1987. The committee was convened to prepare and recommend detailed methodology for sunflower rust studies, host genotypes to be used for race differentiation, and specifically a system for designation of rust races. Changing the system of naming the races was advisable as the number of identified rust resistance genes and of identified rust races increased in recent years. It was agreed "to use a descriptive system listing all the resistance gene(s) and/or differentials attacked rather than a code or a sequential race numbering system." The report was presented by Dr. Yang on behalf of the committee, and accepted at the Twelfth International Sunflower Conference, held at Novi Sad, Yugoslavia, in 1988, and was published in the Proceedings of the Conference (1). We feel that a paper whose authors include two members of the committee that agreed on the new system of naming races should at least have listed race designations under the new system along with the older system they used.

Yang et al chose to rename the genes for rust resistance in sunflower "Pu," in place of the designation "R" assigned in 1963 (2). The designation "Pu" parallels the designation "Pl" for genes conferring resistance to the downy mildew pathogen *Plasmopara halstedii*, and might help to avoid confusion with the "R" used in naming some sunflower lines to indicate that they are rust resistant. As an international committee of specialists now exists to facilitate communication and establish generally acceptable and standard procedures and nomenclature for sunflower rust work, however, we feel that proposed changes should be submitted for discussion and endorsement by committee members.

### LITERATURE CITED

1. Anonymous. 1988. Report of the Ad Hoc Committee on Sunflower Rust of the International Sunflower Rust Committee meeting held September 29-30, 1987 at Frederick, Maryland. *Proc. Int. Sunflower Assoc.*, Novi Sad, Yugoslavia 2:250-255.
2. Putt, E. D. and Sackston, W. E. 1963. Studies on sunflower rust. IV. Two genes, R<sub>1</sub> and R<sub>2</sub> for resistance in the host. *Can. J. Plant Sci.* 43:490-460.
3. Yang, S. M., Dowler, W. M., and Luciano, A. 1989. Gene *Pu*<sub>6</sub>: A new gene in sunflower for resistance to *Puccinia helianthi*. *Phytopathology* 79:474-477.