Descriptive and Analytical Characterization of Soil Quality/Health

M. J. Garlynd, D. E. Romig, and R. F. Harris

University of Wisconsin
Madison, Wisconsin

A. V. Kurakov

Moscow State University
Moscow, Russia

National and worldwide initiatives show development and application of methodology for assessment and monitoring of soil quality (term favored by scientists) or soil health (term favored by farmers) as an emerging high priority to provide a basis for maintenance and remediation of soil resources (Larson & Pierce, 1991; Arshad & Coen, 1992; Haberern, 1992; Papendick & Parr, 1992). Soil health is more a farmer than an institution concept, stemming from farmer concerns and observational experiences in the field. Management strategies of soil quality/health and meaningful communication between diverse farmer, agribusiness, and academic interest groups require the availability of mutually respected soil quality/health assessment tools.

The Wisconsin Soil Quality/Health program at the University of Wisconsin-Madison was initiated in 1990 in response to farmer concern expressed at statewide “Listening Meetings” on the need for university work on soil biological quality and soil health. A key working hypothesis is that farmer observational knowledge on soil health can and should be integrated with scientist analytical expertise in soil quality. Farmer-scientist partnership (Porter, 1991; Harris, 1992; Harris et al., 1992; Porter et al., 1992; and Chapt. 2, this book) has resulted in a coordinated set of conceptual, information gathering and analysis, and management tools for soil quality/health assess-

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