

Editorial

## Editorial on Plant Pathology and Soil Health

D. O. Chellemi

U.S. Department of Agriculture, USA

## Abstract

Over the last 10 years, considerable progress has been made in defining and assessing soil health and soil quality. However, problems still exist in the interpretation of soil quality indicators due to the complexity and interrelatedness of soil processes. Additionally, the crop production system selected by growers affects the potential for the adoption of practices promoting soil health. Factors influencing the selection of the crop production system include the marketing strategy adopted by the grower, the commodity value, the cultural practices and inputs used to grow the crop (e.g. fertilisers, pesticides, etc.). To date, growers have had little time to consider the impact of soil health on crop production. Plant pathology, however, and related disciplines have made major contributions to the understanding of soil health, particularly in the area of the identification and verification of disease-suppressive soils and the agents responsible for this suppression. The linkage of plant health to the functional diversity of biological communities in the soil has been far more elusive, but is rapidly becoming more important as consumers and markets push for environmental sustainability. To further progress our understanding of soil health and facilitate its application to production agriculture, plant pathologists should identify and focus on crop production systems that are amenable to showing a return on investment in soil health.