

# CAESA Soil Quality Program

## Research Factsheets

The enclosed research factsheets summarize some of the research results from the Soil Quality Program of the Canada-Alberta Environmentally Sustainable Agriculture Agreement. This five-year, cost-shared agreement was completed in 1997. It funded research, monitoring and technology transfer related to environmentally sustainable agricultural production and processing. The Soil Quality Program monitored and assessed agricultural soil quality. Each of the research factsheets outlines the problem under investigation, study methods and major findings, and provides some applied questions to illustrate the practical implications of the research.

### Monitoring Benchmark Sites

- CSQ01 Benchmark Sites for Monitoring Agricultural Soil Quality, *B.D. Walker, C. Wang and H.W. Rees*
- CSQ02 Effects of Long-term Cultivation on a Morainal Landscape, *B.D. Walker, K. Haugen-Kozyra and C. Wang*
- CSQ03 Soil Variability in Morainal Landscapes of East-central Alberta, *B.D. Walker, K. Haugen-Kozyra and C. Wang*

### Wind Erosion

- CSQ04 Residue Cover versus Soil Clods for Wind Erosion Protection on Fallow, *F.J. Larney, M.S. Bullock and C.W. Lindwall*
- CSQ05 Soil Nutrient Redistribution by Wind Erosion, *F.J. Larney, M.S. Bullock, H.H. Janzen, B.H. Ellert and E.C.S. Olson*
- CSQ06 Herbicide Residues in Windblown Sediment, *F.J. Larney, A.J. Cessna and M.S. Bullock*
- CSQ07 Quantifying Wind Erosion Losses in Alberta, *F.J. Larney, J.G. Timmermans, M.S. Bullock, S.M. McGinn and C.H. Sprout*
- CSQ08 Overwinter Changes in Wind Erodibility Characteristics of Clay Loam Soils in Southern Alberta, *M.S. Bullock and F.J. Larney*
- CSQ09 Relationships between the Wind Erodible Fraction and Freeze-thaw Cycles in Southern Alberta, *M.S. Bullock and F.J. Larney*

### Water Erosion

- CSQ10 A Method for Developing Best Management Practices for Riparian Areas Using WEPP, *D.S. Vanderwel and A.T. Jedrych*
- CSQ11 A Method for Developing Best Management Practices for Preventing Water Erosion on Farmland Using WEPP, *D.S. Vanderwel and A.T. Jedrych*
- CSQ12 Rill and Interrill Erodibility of Alberta Soils, *D.S. Vanderwel, C.R. Wright and S.M. Abday*

### Soil Salinity

- CSQ13 Trends in Dryland Salinity, *D. Wentz and H. Vanderpluym*
- CSQ14 Saline Slough Rings, *W.J. Stolte*

For more information on the Soil Quality Program, contact Gerry Coen of Agriculture and Agri-Food Canada at 403-495-4244 or Hank Vanderpluym of Alberta Agriculture, Food and Rural Development at 403-427-3888. For additional copies of these research factsheets, contact the Conservation and Development Branch of Alberta Agriculture, Food and Rural Development at 403-422-4385.

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