

- 1986–1990. Research report. Rodale Institute Research Center, Kutztown, Pennsylvania.
19. Robertson, W.K., L.C. Hammond, J.T. Johnson, and K.J. Boote. 1980. Effects of plant-water stress on root distribution of corn, soybeans, and peanuts in sandy soil. *Agronomy J.* 72:548–550.
20. Sahs, W., and G. Lesoing. 1985. Crop rotations and manure vs. agricultural chemicals in dryland grain production. *J. Soil and Water Conservation* 40:511–516.
21. SAS Institute. 1985. *SAS User's Guide: Statistical Methods*. 7th ed. Cary, North Carolina.
22. Scheffe, H. 1959. *The Analysis of Variance*. John Wiley & Sons, New York, N.Y.
23. Smucker, A.J.M. 1990. Quantification of root dynamics in agroecological systems. *Remote Sensing Review* 5:237–248.
24. Smucker, A.J.M., S.L. McBurney, and A.K. Srivastava. 1982. Quantitative separation of roots from compacted soil profiles by the hydropneumatic elutriation system. *Agronomy J.* 74:500–503.
25. Snedecor, G.C., and W. G. Cochran. 1980. *Statistical Methods* 7th ed. Iowa State Univ. Press, Ames, Iowa.
26. St. John, T.V., D.C. Coleman, and C.P.P. Reid. 1983. Growth and spatial distribution of nutrient-absorbing organs: Selective exploitation of soil heterogeneity. *Plant Soil* 71:487–493.
27. Voorhees, W.B., J.F. Johnson, G.W. Randall, and W.W. Nelson. 1989. Corn growth and yield as affected by surface and subsoil compaction. *Agronomy J.* 81:294–303.



INSTITUTE NEWS

Rosmann Featured in New Book

Ron Rosmann, a member of the Wallace Institute's President's Council, is featured in *Eco-Pioneers: Practical Visionaries Solving Today's Environmental Problems*, a 462-page book published by the Massachusetts Institute of Technology in late 1997. The book by Steve Lerner devotes one chapter to each of 25 "ecological innovators" who are "modeling ways to log forests, grow food, raise livestock, manufacture goods, construct houses, build transportation systems, generate power, reuse materials, reduce waste, and design sustainable communities while minimizing damage to the web of life. . . .

"They are working to reverse the accelerating pace of our environmental degradation so that our children and grandchildren will not be forced to live ecologically impoverished circumstances."

The chapter about Rosmann is entitled "Sustainable Agriculture Takes Root Among Family Farmers in Iowa." Rosmann "moved through a number of stages" on his family farm: "he started out as a conventional farmer who used both pesticides and chemical fertilizers; subsequently he took to farming with a minimum of agrochemicals; and more recently he adopted strictly organic methods."

There are two main reasons Rosmann switched to organic farming: first, "he found that by using ridge tillage, crop rotation, and integrated pest management, he simply didn't need herbicides or pesticides." The second reason "was purely economic. Times

are hard for small family farms in the Midwest, Rosmann notes, and economies of scale are forcing farmers to either become bigger or specialize. Rosmann found that by going organic he could access a niche market and command a significantly higher price for his produce."

Rosmann has also become a vocal advocate of sustainable farming. To promote sustainable agriculture, "Rosmann has twice had an opportunity to present his views on farming to President Clinton, and other sustainable farmers have become politicized as well."

Rosmann's view of sustainable farming concludes the chapter: "We have something worth fighting for here: the values of family farming, small communities, and living in harmony with the earth. On the farm I feel such a closeness to the earth and ultimately to God our Creator. What we value is our relationship to the land and our family."

Weil Wins Soil Science Education Award

Raymond R. Weil, a member of the Editorial Board of the *American Journal of Alternative Agriculture*, has received the Soil Science Education Award from the American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America. Recipients of this award are "productive, competent individuals known for original and significant research and for an outstanding ability to inspire the qualities of sound thinking, objectivity, integrity and cooperation," according to an article in *Agronomy News* (November, 1997).

Weil, professor of soil science in the Department of Natural Resource Sciences and Landscape Architecture at the University of Maryland, focuses his teaching on "fundamental concepts and an ecological approach to soil systems," the article said. His courses are "known for their intellectual challenge, integration with his research program, and his innovative, interactive teaching style."

Thompson Farm Publishes Annual Research Report

"Alternatives in Agriculture," the 1997 annual research report of Thompson On-Farm Research in Boone, Iowa, has been published by Dick and Sharon Thompson, and Rex and Lisa Thompson. It updates all previous reports and describes all of the sustainable and alternative agriculture experiments conducted on the farm.

Chapters detail the farm's Inspiration, Documentation and Education; research on Fertility; Cover Crops; Alternative Weed Management Systems; Crops; Water Quality, Soil Health; Economics; Livestock; and Farming Systems and the Viability of Rural Communities. All of the experiments are summarized in table form at the end of each chapter.

The publication of the report and the 1997 research are made possible by the financial support of Mrs. Jean Wallace Douglas through the Wallace Institute. Copies of the report are \$10 each from Thompson On-Farm Research, 2035 190th Street, Boone, IA 50036-7423; (515) 432-1560.