

## CURRICULUM VITAE

- **Date:** January 2003
- **Name:** Johannes Bouma. Born: 29-10-1940 in Vrouwen-Par. (Fr) The Netherlands.
- **Address:** Spoorbaanweg 35, 3911 CA Rhenen. Tel: 31317613469. Email: johan.bouma@planet.nl
- **Current position:** Scientific Director of the Environmental Sciences Group of Wageningen University and Research Center, combining the research Institute ALTERRA and 20 chairs of Wageningen University.
- **Education:**
  - High School (RHBS - Leeuwarden) 1954 - 1959
  - Agricultural University, Wageningen 1959 - 1969
  - Soil Science: Soil Survey (Prof. Pons) - Ir. degree 1966 (cum laude)
  - Soil Physics (Prof. Bolt)
  - Grasslandecology (Prof. 't Hart)
- Ph.D. obtained in 1969 (Profs. Pons and Kuipers):
  - Title thesis: Microstructure and stability of two sandy loam soils with different soil management. Agr. Res. Rep. 724. Pudoc Wageningen. 109 p. (Publ. no 7).
- **Professional experience:**
  - Soil Survey at Irish National Soil Survey (3 months, 1963).
  - Project Assistant, Soils Dept. Univ. Wisc. USA (5 months, 1964).
  - Student Assistant, Soil Science Agric. Univ. Wageningen, 1965-1966.
  - Wetenschappelijk medewerker ("Assistant Professor") Dept. Soil Science, Agr. Univ. Wageningen, 1966-1969.
  - Faculty member Dept. Soil Science, Univ. Wisconsin Madison WIS. USA.  
Project Associate: 1969-1970; Visiting Assistant Prof. 1970-1971; Assistant Prof. 1971-1973. Associate Prof. ~~with tenure~~ 1973-1975.  
In the Wisconsin period I was project leader of the interdisciplinary Small Scale Waste Management Project, and did research on soil physics and soil morphology.
  - Head Dept. of Soil Physics. Neth. Soil Survey Institute, 1975-1983.
  - Lecturer in Soil Science IHE in Delft (Inst. Hydraulic Engineering 1978-1980.)
  - Visiting Adjunct Prof of Soil Science at Univ. of Gainesville, Florida, USA, in May and June, 1981.
  - Invited guest worker CSIRO for 2 months in 1982.
  - Deputy Director of the Neth. Soil Survey Institute, in charge of research, 1983-1986.
  - Part-time (one day a week) teaching assignment (at Professorial level) at the Univ. of Amsterdam, 1984-1986.
  - Professor of Soil Inventarisation and Land Evaluation at the Dept. of Soil Science and Geology of the Agric. University in Wageningen, The Netherlands, 1986-1991 (0.4 of time since 1-1-'98).
  - Visiting Professor, Dept. Soils, Crops and Atmospheric Sciences, Cornell University, USA. Oct 1 -Dec. 31, 1992.
  - Director Graduate School Production Ecology 1993-1998.
  - Member Scientific Council for Government Policy in the Hague 1998-2003 (0.6 of time).
  - Co-chair ICASA (Int. Consortium for Agricultural Systems Analysis) 1996-2001. .
  - Member RAWOO (Advisory Council Scientific Research on Development Cooperation) 1996-2002 .
  - Member of the board of WOTRO-NWO. (Tropical research of the National Science Foundation) 2000-2002
  - Chairman of the section of Earth Sciences of the Royal Dutch Academy of Sciences (1998-2002).
  - Scientific Director of the Environmental Sciences Group of Wageningen University and Research Center  
November 2001 – November 2003. ( 40% until 1-1-2003).
- **Teaching experience**
  - 1966 - 1969. Supervision of student research, lectures and field training.
  - 1969 - 1975. Student research in Wisconsin.  
Soil Survey Seminars and lectures for Prof. Hole.
  - 1975 - 1980. 24 lectures on Soil Quality Management at the Technical University Delft, The Netherlands in 1978, 1979 and 1980. (terminated on my own request).
  - Invited lectures on morphological aspects of the field soil water regime for Prof. Bolt. (Agric. Univ.) 1979 through 1986.

- Invited lectures on quantitative land evaluation for Profs. Pons and Bennema, 1979, 1980, 1983, 1985.
- Teaching assignment at Univ. of Amsterdam (see above).
- Courses at AUW. (Introduction to Soil Science, Soils of the World, Landevaluation).
- Supervision of Ph.D. theses
  - J.H.M. Wösten. 1990. Use of soil survey data to improve simulation of water movement in soils.
  - A. Stein. 1991. Spatial Interpolation. (with Corsten).
  - H.A.J. van Lanen. 1991. Qualitive and quantitative physical land evaluation: an operational approach.
  - A.K. Bregt. 1992. Processing of soil survey data.
  - P.A. Finke. 1992. Spatial variability of soil structure and its impact on transport processes and some associated land qualities.
  - W.A. Blokhuis. 1993. Vertisols in the central clay plain of the Sudan. (with N.v.Breemen)
  - E.M.A. Smaling. 1993. An agro-ecological framework for integrated nutrient management with special reference to Kenya. (with B. Janssen).
  - J. Huising. 1993. Land use zones and land use patterns in the Atlantic Zone of Costa Rica. (with M. Molenaar).
  - H. Booltink. 1993. Morphometric methods for simulation of water flow.
  - M.S.C. Wopereis, 1993. Quantifying the impact of soil and climate variability on rainfed rice production, (with M. Kropff).
  - D.J. Brus. 1993. Incorporating models of Spatial Structure in sampling Strategies for Soil (with J.J. de Gruyter).
  - J.J.Stoorvogel. 1995. Geographical Information Systems as a tool to explore Land Characteristics and Land Use.( with L.A.Fresco).
  - M.E.F. van Mensvoort. 1996. Soil knowledge for farmers, farmer knowledge for soil scientists. The case of acid sulphate soils in the Mekong, Delta, Vietnam. (with Vo Thong Xuan).
  - Le Quang Tri. 1996. Developing management packages for acid sulphate soils based on farmer and expert knowledge. Field study in the Mekong Delta, Vietnam. (with Vo Thong Xuan).
  - Le Quang Minh. 1996. Integrating soil and water management in acid sulphate soils. Balancing agricultural production and environmental requirements in the Mekong Delta, Vietnam. (With Vo Thong Xuan).
  - J. van den Burg. 1996. De betekenis van bodem en klimaat voor het nederlandse bos. (with Dr. W. Vos - IBN-DLO.).
  - P. Droogers. 1997. Quantifying differences in soil structure induced by farm management.
  - J. Verhagen. 1997. Spatial soil variability as a guiding principle in nitrogen management.
  - J.M. Cardoso de Barros. 1997. Quantitative analysis of selected land-use systems with sunflower (with P.M. Driessen
  - D. Casanova. 1998. Quantifying the effects of land conditions on rice growth (with J. Goudriaan).
  - L.W. Dekker. 1998. Moisture variability resulting from water repellency in Dutch soils (with R.F. Feddes).
  - C.J. Ritsema. 1998. Flow and transport in water repellent sandy soils (with R.F. Feddes).
  - O. Husson. 1998. Spatio-temporal variability of acid sulphate soils in the Plain of Reeds, Vietnam (with L.O. Fresco and E. Smaling).
  - J.P. Okx. Soil remediation. 1998. A systems approach. (with A. Stein and L. Hordijk).
  - R.A.J. Plant. 1999. Effects of land-use on regional nitrous oxide emissions in the humid tropics of Costa Rica. (with N. van Breemen).
  - J.W. van Groenigen. 1999. Constrained optimisation of spatial sampling. A geostatistical approach. (with A. Stein).
  - M. Gandah. 1999. Spatial variability and farmer resource allocation in millet production in Niger. (with A. Stein and J. Brouwer).
  - M.J.D. Hack-ten Broeke. 2000. Nitrate leaching from dairy farming on sandy soils. Case studies for experimental farm De Marke.
  - P. Verburg. 2000. Exploring the spatial and temporal dynamics of land use with special reference to China. (with L.A. Fresco and A. Veldkamp).
  - C.A.J.M. de Bie. 2000. Comparative Performance Analysis of Agro-Ecosystems (with P.M. Driessen).
  - K. Kok. 2001. Scaling the land use system. (with L.O. Fresco en T. Veldkamp).
  - G. Crescimanno. 2001. Irrigation practices affecting land degradation in Sicily. (with H. Booltink).
  - J.van Alphen. 2001. Soil processes as a guiding principle in precision agriculture. ( with J.S.Stoorvogel and H.W.G.Booltink).

- J.M.Schoorl. 2002. Addressing the multiscale Lapsus of landscape.( with T.Veldkamp).
- D.Rugege. 2002. Regional analysis of maize -based land use systems for early warning application ( with P.M.Driessen)
- M.Pulleman. 2002. Interactions between soil organic matter dynamics and soil structure as affected by farm management ( with N.van Breemen and J.Marinnesse).

#### Congresses

- Active participation in all Agronomy meetings from 1970 through 1974. (see publication list).
- Invitational lecture for Symposium: "Field Soil Water Regime" ASA. 1971. (Publ. no. 13).
- Invitational lecture for Symposium: "Water Movement in heavy clay soils" (ISSS-ICIO). Bratislava (publ. no 66).
- Active participation in ISSS Congresses (Int. Soil Science Society) in 1978 (Edmonton); 1982 (New Delhi) 1986 (Hamburg), 1990 (Kyoto), 1994 (Mexico), 1998 (Montpellier)
- Active participation in EGS Congresses (European Geophysical Society). 1978 (Strassbourg); Vienna (1979); Budapest (1980); Leeds (1982); Louvain (1984) Convenor of symposia in Budapest and Leeds. Member program committee Leeds.
- Initiator and secretary of organising committee: for the Congress: "Water and Solute movement in heavy clay soils". Wageningen, 1984.
- Initiator and chairman of organising committee: for the Congres: "Land Qualities in Space and Time", Wageningen, August 1988.
- Member of organizing committee of Int. Conference on: Effects of crop rotation on potato production in the temperate zones (Wageningen, August 1988)
- Invited convenor of Conference Symposium on Spatial Variability, ISSS Congress Kyoto, Japan, 1990.
- Member Organizing Committee ISSS Conference on Pedometrics. Wageningen, 1992.
- Member Organizing Committee Int. Conference: EUROSOL; September 1992.
- Co-organizer Conference on: Operational methods to characterize soil behaviour in space and time (with R.J. Wagenet) Cornell, July 1992.
- Member Organizing Committee Int. Conference on: "The future of the land". August 1993. Wageningen, The Netherlands.
- Member Organizing Committee Symposium: Eco-Regional approaches for Sustainable Land Use and Food Production. The Hague, November 1994. Chief Editor of the Kluwer Book based on this conference.
- Chairman organizing Committee Workshop: Soil and Water Quality at Different Scales. Int. Soc. Soil Science, Wageningen, August 1996.
- CIBA Foundation: Symposium on Precision Agriculture (January 1997).
- Convenor of Conference at the KNAW (Royal Dutch Academy of Sciences). Interactive north-south research for development: with special attention for natural resources management. First Conference December 200; Second conference December 2001.
- ~~Soil Science Society of America; period after 1975:~~
  - Invitational paper for Symposium "Planning the use and management of Land. Muscle Shoals. USA. 1979 (Publication no. 68).
  - Same, symposium: "Water movement in soils with macropores". Detroit, 1980 (Publ. no. 100).
  - Same, symposium: "Land use planning and policies" Atlanta, 1981 (Publ. no. 131).
  - Same, symposium: "Field soil characterization". Anaheim, 1982. (Publ. no. 124).
  - Co-organiser of symposium: "Spatial variability of soil physical properties". Las Vegas, 1984 (Publ. no. 144).
  - Invitational paper for symposium on Vertisols: "Characterizing water movement in Vertisols". Chicago. 1985. (Publ. no. 175).
  - Invitational paper for Symposium on macropore-flow in soils. Anaheim, 1988. (Publ. no. 206).
  - Invitational paper for Symposium on: "Spatial variability and Map Units of the National Cooperative Soil Survey", Las Vegas, October 1989. (Publ. no. 201).
  - Invitational papers for Symposium on Modeling Pedogenesis. SSSA Meeting, Minneapolis. Nov. 1992. (Papers 232, 233).
  - Invitation to present keynote address on "Soils: A global mandate" in plenary session SSSA in Cincinnati, November 1993.
  - Invitational paper for SSSA symposium Cincinnati. Nov. 1993: " Reliability of soil data and risk assesment of data applications". (Publ. no. 254).
  - Invitational Paper SSSA Symposium Seattle. November 1994. The role of soil science in interdisciplinary

- projects. (Publ. no. 263).
- Invitational paper ICASA Symposium, ASA Seattle, Nov. 1994: "Site specific management: Balancing production and environmental requirements at farm level". (Publ.no. 261).
- Invitational papers ASA meetings St-Louis, Oct 1995: "Assessing soil quality for environmental purposes". In S-11 Symposium: Clean soils, Clean Water, Clean Air: Assessing Soil Quality for Environmental Purposes. (Publ.no. 269).
- "Modelling soil variability". In Symposium: "The state of site-specific management in Agriculture". (S6,S4,S8,S5,A3) (Publ.no. 268).
- Invited paper for the Bouyoucouc Conference, Riverside Cal, USA, May 1995: "Applications of GIS to the modeling of non-point source pollutants". Title paper: use of soil survey data for modeling solute transport in the vadose zone. (Publ.no. 264).
- Invited paper for 1997 Bouyoucouc Conference, Riverside Cal. (Publ. no. 326).
- Invited paper Agronomy Meeting, Anaheim 1997: "Basic and applied Science .... bridging the gap". (Publ. no. 310).
- Invited paper Agronomy Meeting, Anaheim 1997: "Soil quality effects on global carrying capacity". (Publ. no. 309).
- Invited paper Agronomy Meeting Baltimore 1998: "Phenofoms of established soil series: linking Taxonomy with sustainable land use".
- Invited paper Agronomy Meetings, Salt Lake City. 1999. "Soil quality as an indicator of sustainable land management: demonstrated successes and continued needs".
- Invited paper for Symposium: "Soil Classification: Contributions to advances in Pedology". Agronomy Meetings, North Carolina, october 2001.
- Invited Keynote address for symposium on Hydropedology at Agronomy Meetings in Denver, 3-5 November 2003.
- Invitations and advisory work
  - Lectures at workshop and seminars on soil disposal of liquid waste in the period 1970 - 1975. (Boise, Chicago, Boston, Minneapolis, Cleveland, Seattle, Denver, Ottawa a.o.). After return to the Netherlands invitations to lecture at workshops in Madison (USA) (in 1976 and 1977); SCS-USDA Lincoln (3 days 1977; 1 week, 1978); North Carolina State Univ. (1977); SCS-USDA-Washington DC (1977, 1978). US. Cold Regions Lab. (1978); Div. of Health, Wash. State (1978).
  - Invitation to participate in a workshop on soil purification of liquid waste at US Army Cold Regions Res. Lab. and to write chapter in a book (1978). Publ. no. 68.
  - Consultant FAO. Field application of soil physical methods. 1981. Greece.
  - US-Env. Protection Agency. Official Consultant in the period 1979-1981.
  - Invitation to be visiting Prof. of Soil Science. Univ. of Florida - Gainesville (1 month, 1981).
  - Invitation to be guest worker of CSIRO - Australia. Febr.- April, 1982.
  - Invitation for a visit to the USSR by the Academy of Sciences, 1984. Lectures at the Puschino Institute, and Moscow State University.
  - Invitation for a lecture at the meetings of the British Soil Science Society. York, 1985.
  - Same for meetings of the Norwegian Soil Science Society. Ås, 1985.
  - Same for a lecture on: "The future of Soil Survey" at Universities of Wisconsin and Minnesota, 1985.
  - Invitation by the Hungarian Academy of Science, 14-18 October 1987; lectures in Budapest.
  - Invitation to present opening lecture at MSc-course, Gent, Belgium. 1988.
  - Invitation to present seminars at Soils Depts in Hannover and Braunschweig (November and December 1987).
  - Invitation to present keynote address at an International Interactive Workshop (March '88) at the University of Minnesota on Soil Resources: their inventory, analysis and interpretation for use in the 1990's.
  - Invitation to present plenary review paper on Hydromorphic Soils at the International Working Meeting on Soil Micromorphology, San Antonio, Texas, July 1988.
  - Invitation to present lead paper on: Characterizing soil water relationships in swell-shrink soils in an International Workshop on Classification, Management and use potential of swell-shrink soils. Nagpur, India. October 1988.
  - Invitation to present lead paper on: Soil Survey Information for crop simulation modelling. Int. Workshop Multipurpose use of soil survey information. Nairobi, Kenya, March 1989.
  - Invitation to present Agronomy lecture, May 1, 1989 at the University of Minnesota with the title: "Agriculture and the Environment: A European perspective".

- Invitation to present paper (with Wagenet and Grossmann) in Symposium on: "Spatial Variability and Map Units of the National Cooperative Soil Survey", Agronomy Meetings, Las Vegas, October 1989.
- Invitation to present paper at workshop on "Methods for estimating hydraulic properties of unsaturated soils". Riverside USA, October 1989.
- Convenor of Symposium on spatial variability, Int. Congress of Soil Science. Kyoto, Japan, August 1990.
- Invitation to present paper at International NATO Conference: "Clay swelling and expansive soils". Cornell Univ. Aug. 1991.
- Invitation to present paper at International Symposium on: "Systems approaches for agricultural development". Bangkok, 1991.
- Invitation to present paper at International ISSS workshop on Methods of research on soil structure / soil biota interrelation-ships. Wageningen, November 1991.
- Invitation to present paper at the Fourth International Symposium on Acid Sulphate Soils. Vietnam, March 1992.
- Invitation to present keynote paper in Workshop: Soil Specific Management. University of Minnesota. April 14 - 16, 1992.
- Invitation to present keynote paper in Conference on: Operational methods to characterize soil behavior in space in Time. Cornell, University. July 26 - 29, 1992.
- Invitation to present key note address on: Future challenges to agricultural research. Opening session of the Foulum Agric. Center in Denmark. May 26, 1993.
- Invitation to present keynote paper in International workshop on Sustainable Land Management for the 21th Century. Lethbridge, Canada. June 1993.
- Invitation to present paper at SSSA Plenary Session: "Soil Science - A global mandate". Agronomy Meetings - Cincinnati, Ohio, Nov. 1993.
- Invitation to convene a Symposium at the XVth conference of the Int.Soc. of Soil Science. Mexico 1994.
- Invitation to present paper in seminar: Site Specific Farming. Denmark, March 1995.
- Invitation to present keynote address at the Conference of the Australian and New Zealand Societies of Soil Science. Melbourne. July 1996. (paper 284).
- Invitation to present paper at IBSRAM-IRRI Conference on Research Management Domains, Kuala Lumpur, Malaysia, 23-26 August 1996 (Publ. no. 289).
- Keynote paper at ITC Conference: "Geoinformation for sustainable land management". Enschede 17-21 August 1997. (Publ. no. 307).
- Invited paper Spruce Conference IV: Statistics for Environment. Enschede, Netherlands 7-12 September 1997. (Publ. no. 304).
- Invited paper ISSS Congres Montpellier 1998: Developments in Land Evaluation. (Publ. no. 329).
- Keynote address yearly meeting Italian Soil Science Society, June 1999; Aosta: "New approaches in land evaluation". (publ. 331).
- Keynote address in conference on "Soil Resources: their inventory, analysis and interpretation for use in the 21th Century". Title of paper: "The strength of the past is the key to the future". Occasion: 100 years of soil survey in the USA. St. Paul. Minnesota, USA. (publ. 330).
- Keynote address for the German Society of Soil Science. Hohenheimer Umwelt tag. January 2000: Title: "Trends of worldwide soil degradation" (publ. 341).
- Keynote address in conference on: "Soil Stresses, Quality and care", in As, Norway. April 2000. Title: "The quality concept as a means to improve communications about soils". (publ. 343).
- Keynote address Vth Netherlands aarndwetenschappelijk Congres. Veldhoven, april 2000: "Input from the Earth Sciences in the land negotiation process".
- General keynote address in the first European Soils Conference, EUROSOIL 2000. Reading Sept 2000.
- Keynote address in session on Soil Science and Land Use Planning; First European Soils Conference. EUROSOIL 2000, Reading, Sept. 2000.
- Invited paper for EU Conference on "Foodchain 2001", Uppsala, Sweden, 14-16 march 2001.
- Invited paper for SSSA -ASA Symposium on Soil Classification Agronomy Meetings, Charlotte N.C. October 2001.
- Member Committee of Experts to judge the "fertilizer law" ( Meststoffenwet) for the Environmental Planning Agency. (RIVM). 2002.
- Independent expert for the committee of the Socio-Economic Council (SER) advising on Innovation and Food and Greenery. 2002.
- **Memberships and functions**

- American Society of Agronomy and Soil Science Society of America.
- International Soil Science Society, First vice chairman of Commission I (Soil Physics) and chairman of working group on moisture variability (MV). Vice chairman of working group Pedometrics (PD).
- Dutch soil science society (Chairman 1982 - 1985).
- American Association for the Advancement of Science.
- European Geophysical Society (Member council) 1982 - 1985; member program committee 1982).
- Member program committee European Economic Community, Brussels DG-VI (Agriculture). 1981-1984.
- Chairman of the Soils committee of the Dutch Council for Agricultural Research). 1984 - 1988.
- Chairman of ICOMAQ (Int. Comm. on Aquic Moisture Regimes). Funded by SMSS - SCS - USDA. In this context participation in Symposia on acid sulphate soils Senegal (1986); Oxisols in Brazil (1986) Andosols in Japan (1987) and Soils with aquic conditions in Louisiana and Texas (1990).
- Editor in Chief of the Journal: Geoderma (per 1/1/89 until 1/1/1995). Associate Editor since 1995.
- Associate Editor of the following Journals:
  - Catena (soil aspects)
  - Agricultural Water Management
  - Hydrological Processes
  - Tropical Agriculture
  - Pedology
  - International Agrophysics
- Member of the Board of the International Institute for Land Reclamation and Improvement in Wageningen. (1991-1998).
- Member of the Board of the Postdoctoral Educational Program of the Agricultural University (PHLO). 1991-1997.
- Chairman of the board of the MSc-course: Soil and Water. (1987- 1997).
- Member examination Committee L15-L50 Agricultural University. (1987-1997).
- Team member (Natural Resources) evaluation mission by US-AID for the IBSNAT project. Hawaii July 10-17, 1990.
- Secretary of the Council for Earth Sciences of the Royal Dutch Academy of Sciences (1991-1994).
- Member of the Governing Council of the Larenstein School for Soil and Water Research (1990-1994).
- Member International Evaluation Team of Danish Agricultural Research (plant aspects), February 3 - 8, 1992.
- Member International Evaluation Team of Norwegian Soil Science. (August 1992).
- Member International Visitation Committee of the Winand Staring Centre for integrated soil and water research. (December 1992).
- Chairman of University committee to integrate BSc-MSc. PhD. degree programs (1992).
- Member Board of Deans, Agricultural University, Wageningen (1993-1996).
- Member Council for Geological Oceanographic and Earth sciences (GOA) of the National Dutch Organization for Basic Research (NWO) (1993-1998).
- Scientific Director of the C.T.de Wit Graduate School of Production Ecology (1993-1998).
- Member International Visitation committee of the McCauley Institute for Land-use research in Aberdeen, Scotland (1994).
- Member Visitation Committee of the Institute of Agrobiological and Soil Fertility Research (AB-DLO) (May, 1995).
- Member of Program Committee Indonesia, Royal Dutch Academy of Sciences. (1994- ).
- Member of the Board of the Int. Soil Reference and Information Center (ISRIC) in Wageningen (1991- ).
- Member of the WAR (Scientific Advisory Board) of the International Education Federation of the Agr. Univ. Wageningen and five Institutes of Int. Education in The Netherlands (1995-1997).
- Member of Scientific Planning Committee of the Land Quality Indicators Program. World Bank Washington. (1996-1998).
- Member of the Steering Cie of the Global Terrestrial Observation System (GTOS) (FAO, ICSU, UNEP, UNESCO, WMO). (1996-1998).
- Member of RAWOO (Raad van Advies voor het wetenschappelijk onderzoek in het kader van ontwikkelingssamenwerking) (Advisory Council scientific research for development aid). (1996- 2002)
- Member of review committee of the FAO/Inst. Atomic Energy Agency (Vienna) (1996).
- Member of the Netherlands Scientific Council for Government Policy (1998-2003).
- Co-chair ICASA (Intern. Consortium of Agric. Systems Applications). (1996-2001).
- Chairman section Earth Sciences of the Royal Academy of Sciences. (1998-2002).
- Member of the Board of WOTRO-NWO (Tropical research division of the National Science Foundation)

( 1999-2002).

- Awards

- Fellow of the Soil Science Society of America (Chicago, 1985).
- Elected member of the Royal Dutch Academy of Sciences (1989).
- Korrespondierendes Mitglied Deutsche Bodenkundliche Gesellschaft (1989) (Equivalent to Fellow).
- Officer in the order of Orange Nassau (2001).

### List of Publications

1. Bouma, J. and F.D. Hole. 1965. Soil peels and a method for estimating biopore size distribution in soil. *Soil Sci. Soc. Amer. Proc.* 29:483-485.
2. Meester, T. de and J. Bouma. 1967. The collection of natural soil profiles from arid regions: A field manual and method. *Neth. J. Agric. Sci.* 15:63-74.
3. Bouma, J., L.J. Pons and J. van Schuylenborgh. 1968. On soil genesis in temperate humid climate. VI. The formation of a glossudalf in loess (silt loam). *Neth. J. Agr. Sci.* 16:58-70.
4. Bouma, J. and J. Schuylenborgh. 1969. On soil genesis in temperate humid climate: VII. The formation of a glossaqualf in a silt loam terrace deposit. *Neth. J. Agr. Sci.* 17:261-271.
5. Bouma, J., J. Hoeks, L. van der Plas and B. van Scherrenburg. 1969. Genesis and morphology of some alpine podsol profiles. *J. Soil Sci.* 20:384-398.
6. Bouma, J. and L. van der Plas. 1971. Genesis and morphology of some alpine pseudogley profiles. *J. Soil Sci.* 22:81-93.
7. Bouma, J. 1969. Microstructure and stability of two sandy loam soils with different soil management. *Agr. Res. Report No. 724*, Pudoc, Wageningen. pp. 109.
8. Bouma, J., F.D. Hole and D.I. Hillel. 1970. Development of field procedure for predicting movement of liquid wastes in soils. Report No. 1, GNHS, Univ. Ext. Univ. of Wis. pp. 110.
9. Bouma, J. and F.D. Hole. 1971. Development of field procedure for predicting movement of liquid wastes in soils. Report 2, GNHS, Univ. Ext., Univ. of Wis. pp. 163.
10. Bouma, J. and F.D. Hole. 1971. Soil structure and hydraulic conductivity of adjacent virgin and cultivated pedons at two sites: A typic argiudoll (silt loam) and a typic eutrochrept (clay). *Soil Sci. Soc. Amer. Proc.* 35:316-319.
11. Bouma, J., D.I. Hillel, F.D. Hole and C.R. Amerman. 1971. Field measurement of unsaturated hydraulic conductivity by infiltration through artificial crusts. *Soil Sci. Soc. Amer. Proc.* 35:362-364.
12. Bouma, J., 1971. Evaluation of the field percolation test and an alternative procedure to test soil potential for disposal of septic tank effluent. *Soil Sci. Soc. Amer. Proc.* 35:871-875.
13. Bouma, J. and J.L. Anderson. 1973. Relationships between soil structure characteristics and hydraulic conductivity. In: R.R. Bruce (Ed.). *Field Soil Moisture Regime*. SSSA Special Publ. No. 5, Chapter 5, pp. 77-105.
14. Bouma, J., W.A. Ziebell, W.G. Walker, P.G. Olcott, E. McCoy and F.D. Hole, 1972. Soil disposal of septic tank effluent: A field study of some major soils in Wisconsin. *Information Circ. No. 20*, Geol. Nat. Hist. Surv., Madison. 240 p.
15. Bouma, J. and J.L. Denning, 1972. Field measurement of unsaturated hydraulic conductivity by infiltration through gypsum crusts. *Soil Sci. Soc. Amer. Proc.*, Vol. 36: 846-847.
16. Bouma, J., 1973. Use of physical methods to expand soil survey interpretations of soil drainage conditions. *Soil Sci. Soc. Amer. Proc.* 37: 413-421.
17. Anderson, J.L. and J. Bouma, 1973. Relationships between hydraulic conductivity and morphometric data of an argillic horizon. *Soil Sci. Soc. Amer. Proc.* 37:408-413.
18. Walker, W.G., J. Bouma, D.R. Keeney and F.R. Magdoff, 1973. Nitrogen transformations during subsurface disposal of septic tank effluent in sands. I. Soil transformations. *J. Env. Qual.*, Vol. 2, No. 4,

475-479.

19. Walker, W.G., J. Bouma, D.R. Keeney and P.G. Olcott. 1973. Nitrogen transformations during subsurface disposal of septic tank effluent in sands. II. Groundwater Quality. *J. Env. Qual.*, Vol. 2, No. 4, 521-525.
20. Beatty, M.T. and J. Bouma, 1973. Application of soil surveys to selection of sites for on-site disposal of liquid household wastes. *Geoderma*, 10 (113-122).
21. Bouma, J., 1973. Guide to the study of water movement in soil pedons above the water table. Internal Bulletin. *Wis. Geol. Nat. Hist. Surv.*, 194 p.
22. Bouma, J., 1974. Use of soil for disposal and treatment of septic tank effluent. Proceedings Rural Environmental Engineering Conference, Warren, Vermont. Univ. Press of New England (498 p.) p. 89-95.
23. Bouma, J., 1974. Use of improved field techniques for measurement of hydraulic properties of soils. Proceedings Rural Env. Eng. Conf., Warren, Vermont. Univ. Press New England (498 p.) p.181-191.
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