# Biography and statement of purpose

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## Studies

B.S.A. (1982), Bio-agronomy, Laval University, Quebec, Canada
Ph.D. (1986), Plant Science, Laval University, Quebec, Canada

## Summary

Dr. Tremblay is the outgoing secretary of the Board of the International Society for Precision Agriculture (ISPA). He leads an important research program for the Government of Canada and he is known for his ability to generate new knowledge for the benefit of the agricultural sector. Dr. Tremblay is currently involved in the variable rate management of N applications involving remote sensing, geomatics, geostatistics and meta-analyses. He conducts research on fluorescence techniques for the detection of stresses affecting crops. Dr. Tremblay has been enlisted as an expert on new technologies in agriculture by the Senate of Canada. His expertise in the production of vegetable transplants is also well known. He leads a team of five research assistants, one postdoctoral fellow, as well as Ph.D. and M.Sc. students in co-supervision. Dr. Tremblay is adjunct-professor at Laval University, University of Ottawa and at the Université de Montréal. He is President of the *Commission chimie et fertilité des sols* which is the official body for fertilizer recommendations in Quebec. He is a member of: American Society of Agronomy (ASA), Crop Science Society of America (CSSA), Soil Science Society of America (SSSA), and the *Association québécoise des spécialistes en sciences du sol* (AQSSS).

## Statement of purpose

The future of precision agriculture is exciting! ISPA is essential to bring together worldwide resources and provide a basis for discussion, reflection, representation and action. We have a long history of successful International Congresses on Precision Agriculture. Our Society is now well organised. It has a strong membership and has established fruitful partnerships. The next steps should aim at bringing focus, identifying issues, spreading the good news, forging alliances and leveraging the great potential of ISPA membership. The world has changed! It is our responsibility to make sure gaps are being filled and PA solutions are provided to the agricultural community. The ISPA can be central to achieving this goal.

## Selected papers


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**Tremblay, N.**, E. Fallon and N. Ziadi. 2011. Sensing of Crop Nitrogen Status: Opportunities, Tools, Limitations and Supporting Information Requirements. HortTechnology 21(3): 274-281.

**Tremblay, N.**, M.Y. Bouroubi, P. Vigneault, and C. Bélec. 2011. Guidelines for in-season nitrogen application for maize (*Zea mays* L.) based on soil and terrain properties. Field Crops Research 122: 273–283.

Zhu, J., **N. Tremblay** and Y. Liang, 2011. A Corn Nitrogen Status Indicator Less Affected by Soil Water Content. Agronomy Journal. 103: 890-898.

Fan, L., Fang, C., Dubé, C., **Tremblay, N.** and Khanizadeh, S. 2011. A non-destructive method to predict polyphenols content in strawberry. Journal of Food, Agriculture & Environment 9 (1): 59-62.

**Tremblay, N.**, M.Y. Bouroubi, B. Panneton, P. Vigneault and S. Guillaume. 2010. Space, time, remote sensing and optimal nitrogen fertilization rates - A fuzzy logic approach. GIS Applications in Agriculture. Volume Two: Nutrient Management for Energy Efficiency. Taylor & Francis Group. Edited by John F. Shanahan, CRC Press, Pages 101–121.

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**Tremblay, N.**, M.Y. Bouroubi, B. Panneton, S. Guillaume, P. Vigneault and C. Bélec. 2010. Development and validation of fuzzy logic inference to determine optimum rates of N for corn on the basis of field and crop features. Precision Agriculture 11(6): 621-635.

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Fortier, E., Y. Desjardins, **N. Tremblay**, C. Bélec, M. Côté. 2010. Influence of Irrigation and Nitrogen Fertilization on Broccoli Polyphenolics Concentration. Acta Horticulturae (ISHS) 856: 55-62.

Samborski, S.M., **Tremblay, N.**, and Fallon, E. 2009. Strategies to make use of plant sensors-based diagnostic information for nitrogen recommendations. Agronomy Journal 101(4): 800-816.

**Tremblay, N.**, Z. Wang, B.L. Ma, C. Bélec and P. Vigneault. 2008. A comparison of crop data measured by two commercial sensors for variable-rate nitrogen application. Precision Agriculture 10(2): 145-161.