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# **Acid Neutralization and Sulphur retention in S-impacted Andosols**

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# List of Publications

## A. International Peer-Reviewed Journals

- Delfosse, T., Delmelle, P., Givron, C. & Delvaux B. 2005. Inorganic sulphate extraction from SO<sub>2</sub>-impacted Andosols. *European Journal of Soil Science*, **56**, 127-133.
- Delfosse, T., Delmelle, P., Iserentant, A. & Delvaux, B. 2005. Contribution of SO<sub>3</sub> to the acid neutralizing capacity of Andosols exposed to strong volcanogenic acid and SO<sub>2</sub> deposition. *European Journal of Soil Science*, **56**, 113-125.
- Delfosse, T., Elsass, F. & Delvaux, B. 2005. Direct evidence of Basic Aluminium Sulphate minerals in an S-impacted Andosol. *European Journal of Soil Science*, **56**, 281-286.
- Delmelle, P., Delfosse, T. & Delvaux, B. 2003. Sulfate, chloride and fluoride retention in Andosols exposed to volcanic acid emissions. *Environmental Pollution*, **126**, 445-457.
- McGonigle, A., Delmelle, P., Oppenheimer, C., Tsanev, V., Delfosse, T., Williams-Jones, G., Horton, K. & Mather., T. 2004. SO<sub>2</sub> depletion in tropospheric volcanic plumes, *Geophysical Research Letters*, **31**, L13201.
- Delfosse, T., Delmelle, P. & Delvaux, B. Sulphate sorption at high equilibrium concentration in Andosols. Submitted to *Geoderma*.
- Delfosse, T., Delmelle, P. & Delvaux, B. Ion exchange resins and column leaching experiment to study acid neutralization processes in S-impacted Andosols. In preparation.

## B. Conference Proceedings

- Delmelle, P., Stix, J., Baxter, P. & Delfosse, T. 2001. Atmospheric dispersion, subsequent deposition and environmental effects associated with the low-altitude gas plume emitted from Masaya volcano, Nicaragua. *Origins, Emissions and Impacts of Volcanic Gases*, London.
- Delfosse, T., Bar, I., Hansenne, J., Delmelle, P., & Delvaux, B. 2001. Ammonium fluoride as an extractant for inorganic sulphate in Andosols exposed to S deposition. *International Symposium ‘Volcanic soils: Properties, Processes and Land Use’*, Ponta Delgada, Azores, Portugal.
- Delmelle, P., Delfosse, T., Hansenne, J. & Delvaux, B. 2001. Sulphate, chloride and fluoride storage in Andosols polluted by volcanic gases in the Masaya area Nicaragua. *International Symposium ‘Volcanic soils: Properties, Processes and Land Use’*, Ponta Delgada, Azores, Portugal.
- Delfosse, T., Delmelle, P. & Delvaux, B. 2002. Comparison of various extractants to study inorganic S retention in Andosols. *International Symposium ‘Volcanic soils: Properties, Processes and Land Use’*, Budapest, Hungary.
- Delfosse, T., Delmelle, P., Strauch, W. & Delvaux, B. 2003. Changes in soil chemistry associated with strong acid inputs from Masaya volcano. *8<sup>th</sup> Field Workshop on Volcanic Gases*, Nicaragua and Costa Rica.
- Delfosse, T., Delmelle, P. & Delvaux, B. 2003. Heavy metal concentrations in soils downwind from Masaya volcano (Nicaragua). *American Geophysical Union Fall Meeting*, San Francisco, USA.
- Delfosse, T., Delmelle, P. & Delvaux, B. 2004. Acid Neutralizing Capacity of Andosols: Effects of Weathering Stage and Sulfur Storage. *International Symposium ‘Volcanic soils: Properties, Processes and Land Use’*, Iceland.
- Delvaux, B., Delfosse, T. & Herbillon, A.J. 2004. Non-volcanic Andosols in Europe. *International Symposium ‘Soil Resources of European Volcanic System’*, Iceland.
- Delfosse, T., Delmelle, P. & Delvaux, B. 2004. Acid Neutralization Process and Sulphur Storage in S-Impacted Andosols (Masaya, Nicaragua). *Eurosoil*, Germany.