

List of publications Astrid Oberson

Last update: November 1st, 2023; Peer-reviewed articles listed in the Web of Science Core Collection: 87 publications, 4,800 citations, 55 per item, H-index 39; peer-reviewed books: 2; peer-reviewed chapters: 15.

Peer reviewed articles

1. Mächler F., **Oberson A.**, Grub A. and Nösberger J. 1988. Regulation of photosynthesis in nitrogen deficient wheat seedlings. *Plant Physiol.* 87: 46-49.
2. **Oberson A.**, Fardeau J.-C., Besson J.-M. and Sticher H. 1993. Soil phosphorus dynamics in cropping systems managed according to conventional and biological agricultural methods. *Biol. Fertil. Soils* 16: 111-117.
3. **Oberson A.**, Besson J.-M., Maire N. and Sticher H. 1996. Microbiological processes in soil organic phosphorus transformations in conventional and biological cropping systems *Biol. Fertil. Soils* 21: 138-148.
4. Gijsman A.J., **Oberson A.**, Tiessen H. and Friesen D.K. 1996. Limited applicability of the CENTURY model to highly weathered tropical soils. *Agronomy J.* 88: 894-903
5. **Oberson A.**, Friesen D.K., Morel C. and Tiessen H. 1997. Determination of phosphorus released by chloroform fumigation from microbial biomass in high P sorbing tropical soils. *Soil Biol. Biochem.* 29: 1579-1583.
6. Gijsman A.J., **Oberson A.**, Friesen D.K., Sanz J.I. and Thomas R.T. 1997. Nutrient cycling through microbial biomass under rice-pasture rotations replacing native savanna. *Soil Biol. Biochem.* 29: 1433-1441.
7. Friesen D.K., Rao I.K., Thomas R.J., **Oberson A.** and Sanz J.I. 1997. Phosphorus acquisition and cycling in crop and pasture systems in low fertility tropical soils. *Plant and Soil* 196: 289-294.
8. Sinaj S., Mächler F., Frossard E., Faisse C., **Oberson A.** and Morel C. 1998. Interferences of colloidal particles in the determination of orthophosphate concentrations in soil water extracts. *Commun. Soil Sci. Plant Anal.* 29: 1091-1105.
9. **Oberson A.**, Friesen D.K., Tiessen H., Morel C. and Stahel W. 1999. Phosphorus status and cycling in native savanna and improved pastures on an acid low-P Colombian Oxisol. *Nutrient Cycling in Agroecosystems* 55: 77-88.
10. Almeida J.P.F., Lüscher A., Frehner M., **Oberson A.** and Nösberger J. 1999. Partitioning of P and the activity of root acid phosphatase in white clover (*Trifolium repens* L) are modified by increased CO₂ and P fertilisation. *Plant and Soil* 210: 159-166.
11. Frossard E., **Oberson A.**, Sinaj S. and Fardeau J.-C. 1999. Potential of tracer techniques to assess phosphorus availability in agroforestry. *Agroforestry Forum* 9 (4): 54-57.
12. Frossard E., Condron L.E., **Oberson A.**, Sinaj S. and Fardeau J.-C. 2000. Processes governing phosphorus availability in temperate soils. *J. Environmental Quality* 29: 15-23.
13. Oehl F., **Oberson A.**, Sinaj S. and Frossard E. 2001. Organic phosphorus mineralization studies using isotopic dilution techniques. *Soil Sci. Soc. Am. J.* 65: 780-787.

14. Oehl F., **Oberson A.**, Probst M., Fliessbach A., Roth H.R. and Frossard E. 2001. Kinetics of microbial P uptake in cultivated soils. *Biology and Fertility of Soils* 34: 31-41.
15. Masson P., Morel C., Martin E., **Oberson A.** and Friesen D. 2001. Comparison of soluble P in soil water extracts determined by ion chromatography, colorimetric and inductively coupled plasma techniques in ppb range. *Commun. Soil Sci. Plant Anal.* 32: 2241-2253.
16. **Oberson A.**, Friesen D.K., Rao I.M., Bühler S. and Frossard E. 2001. Phosphorus transformations in an Oxisol under contrasting land use systems: The role of the soil microbial biomass. *Plant and Soil* 237: 197-210.
17. Buehler S., **Oberson A.**, Rao I.M., Friesen D.K. and Frossard E. 2002. Sequential phosphorus extraction of a P-33-labeled oxisol under contrasting agricultural systems. *Soil Sci. Soc. Am. J.* 66: 868-877.
18. Langmeier M., Frossard E., Kreuzer M., Mäder P., Dubois D. and **Oberson A.** 2002. Nitrogen fertilizer value of cattle manure applied on soils originating from organic and conventional farming systems. *Agronomie* 22: 789-800.
19. Oehl F., **Oberson A.**, Tagmann H.U., Besson J.M., Dubois D., Mäder P., Roth H.R. and Frossard E. 2002. Phosphorus budget and phosphorus availability in soils under organic and conventional farming. *Nutrient Cycling in Agroecosystems* 62: 25-35.
20. Bühler S., **Oberson A.**, Sinaj S., Friesen D.K. and Frossard E. 2003. Isotope methods for assessing plant available phosphorus in acid tropical soils. *Europ. J. Soil Sci.* 54: 605-616.
21. Jiménez J.J., Cepeda A., Decaëns T., **Oberson A.** and Friesen D.K. 2003. Phosphorus fractions and dynamics in surface earthworm casts under native and improved grasslands in a Colombian savanna oxisol. *Soil Biol. Biochem.* 35: 715-727.
22. Büinemann E., Bossio D.A., Smithson P.C., Frossard E. and **Oberson A.** 2004. Microbial community composition and substrate use in a highly weathered soil as affected by crop rotation and P fertilization. *Soil Biol. Biochem.* 36: 889-901
23. Büinemann E., Smithson P.C., Jama B., Frossard E. and **Oberson A.** 2004. Maize productivity and nutrient dynamics in maize-fallow rotations in western Kenya. *Plant and Soil* 264: 195-208.
24. Büinemann E., Steinebrunner F., Smithson P.C., Frossard E. and **Oberson A.** 2004. Phosphorus dynamics in a highly weathered soil as revealed by isotopic labeling techniques. *Soil Sci. Soc. Am. J.* 68: 1645-1655.
25. Oehl F., Frossard E., Fliessbach A., Dubois D. and **Oberson A.** 2004. Basal organic phosphorus mineralization in soils under different farming systems. *Soil Biology & Biochemistry* 36: 667-675.
26. **Oberson, A.**, Nanzer S., Bosshard C., Dubois D., Mäder P. and Frossard E. 2007. Symbiotic N₂ fixation by soybean in organic and conventional cropping systems estimated by ¹⁵N dilution and ¹⁵N natural abundance. *Plant and Soil* 290: 69-83.
27. Schärer M., Stamm C., Vollmer T., Frossard E., **Oberson A.**, Flühler H. and Sinaj S. 2007. Reducing phosphorus losses from over-fertilized grassland soils proves difficult in the short term. *Soil Use and Management* 23: 154-164.

28. Bosshard C., Frossard E., Dubois D., Mäder P., Manolov I. and **Oberson A.** 2008. Incorporation of ¹⁵N-labeled amendments into physically separated soil organic matter fractions. *Soil Sci Soc Am J* 72: 949-959.
29. Ehlers K., Büinemann E.K., **Oberson A.**, Frossard E., Frostegård Å., Yuejian M. and Bakken L.R. 2008. Extraction of soil bacteria from a Ferralsol. *Soil Biology & Biochemistry* 40: 1940-1946.
30. Bosshard C., Sørensen P., Frossard E., Dubois D., Mäder P., Nanzer S. and **Oberson A.** 2009. Nitrogen use efficiency of ¹⁵N-labelled sheep manure and mineral fertiliser applied to microplots in long-term organic and conventional cropping systems. *Nutrient Cycling in Agroecosystems* 83: 271-287.
31. Frossard E., Büinemann E., Jansa J., **Oberson A.** and Feller C. 2009. Concepts and practices of nutrient management in agro-ecosystems: Can we draw lessons from history to design future sustainable agricultural production systems? *Die Bodenkultur* 60: 43-60.
32. Douxchamps S., Humbert F.-L., van der Hoek R., Mena M., Bernasconi S., Schmidt A., Rao I., Frossard E. and **Oberson A.** 2010. Nitrogen balances in farmers fields under alternative uses of a cover crop legume: a case study from Nicaragua. *Nutrient Cycling in Agroecosystems* 88: 447-462.
33. **Oberson A.**, Tagmann H., Langmeier M., Dubois D., Mäder P. and Frossard E. 2010. Fresh and residual phosphorus uptake by ryegrass from soils with different fertilization histories. *Plant and Soil* 334: 391-407.
34. Bosshard C., **Oberson A.**, Leinweber P., Jandl G., Knicker H., Wettstein H.R., Kreuzer M. and Frossard E. 2011. Characterization of fecal nitrogen forms produced by a sheep fed with ¹⁵N labeled ryegrass. *Nutrient Cycling in Agroecosystems* 90: 355-368.
35. Douxchamps S., Frossard E., Bernasconi S., van der Hoek R., Schmidt A., Rao I. and **Oberson A.** 2011. Nitrogen recoveries from organic amendments in crop and soil assessed by isotope techniques under tropical field conditions. *Plant and Soil* 341: 179-192.
36. Richardson A., Lynch J., Ryan P., Delhaize E., Smith F., Smith S., Harvey P., Ryan M., Veneklaas E., Lambers H., **Oberson A.**, Culvenor R. and Simpson R. 2011. Plant and microbial strategies to improve the phosphorus efficiency of agriculture. *Plant Soil* 349: 121-156.
37. Simpson R., **Oberson A.**, Culvenor R., Ryan M., Veneklaas E., Lambers H., Lynch J., Ryan P., Delhaize E., Smith F., Smith S., Harvey P. and Richardson A. 2011. Strategies and agronomic interventions to improve the phosphorus-use efficiency of farming systems. *Plant Soil* 349: 89-120.
38. Büinemann E., **Oberson A.**, Liebisch F., Keller F., Annaheim K.E., Huguenin-Elie O. and Frossard E. 2012. Rapid microbial immobilization dominates gross phosphorus fluxes in a grassland soil with low inorganic phosphorus availability. *Soil Biol. Biochem.* 51: 84-95.
39. Douxchamps S., Frossard E., Uelinger N., Rao I.M., Van der Hoek R., Mena M., Schmidt A. and **Oberson A.** 2012. Identifying factors limiting legume biomass production in a heterogeneous on-farm environment. *Journal of Agricultural Science* 150: 675-690.

40. Hgaza V.K., Diby L.N., **Oberson A.**, Tschannen A., Tiéd B.T., Sangakkara U.R., Akéa S. and Frossard E. 2012. Nitrogen use by *Dioscorea alata* L. as affected by mineral fertilizer application. *Agronomy Journal* 104: 1558-1568.
41. Keller M., **Oberson A.**, Annaheim K.E., Tamburini F., Mäder P., Mayer J., Frossard E. and Büinemann E.K. 2012. Phosphorus forms and enzymatic hydrolysability of organic phosphorus in soils after 30 years of organic and conventional farming. *Journal of Plant Nutrition and Soil Science* 175: 385-393.
42. Abbedou S., Diekmann J., Rischkowsky B., Kreuzer M. and **Oberson A.** 2013. Unconventional feeds for small ruminants in dry areas have a minor effect on manure nitrogen flow in the soil-plant system. *Nutrient Cycling in Agroecosystems* 95: 87–101.
43. Liebisch F., Büinemann E.K., Huguenin-Elie O., Jeangros B., Frossard E. and **Oberson A.** 2013. Plant phosphorus nutrition indicators evaluated in agricultural grasslands managed at different intensities. *European Journal of Agronomy* 44: 67-77.
44. **Oberson A.**, Frossard E., Bühlmann C., Mayer J., Mäder P. and Lüscher A. 2013. Nitrogen fixation and transfer in grass-clover leys under organic and conventional cropping systems. *Plant Soil* 371: 237–255.
45. Borda T., Celi L., Büinemann E.K., **Oberson A.**, Frossard E., Barberis E. 2014. Fertilization strategies affect phosphorus forms and release from soils and suspended solids. *J. Environ. Qual.* 43. 1024-1031.
46. Douxchamps S., Rao I.M., Peters M., van der Hoek R., Schmidt A., Martens S., Polania J., Mena M., Binder C.R., Schöll R., Quintero M., Kreuzer M., Frossard E. and **Oberson A.** 2014. Farm-scale trade-offs between legume use as forage vs. green manure: The case of *Canavalia brasiliensis*. *Agroecology and Sustainable Food Systems* 38: 25-45.
47. Liebisch F., Keller F., Huguenin-Elie O., Frossard E., **Oberson A.** and Büinemann E.K. 2014. Seasonal dynamics and turnover of microbial phosphorus in a permanent grassland. *Biol. Fertil. Soils* 50. 465-475.
48. Nanzer S., **Oberson A.**, Berger L., Berset E., Hermann L. and Frossard E. 2014. The plant availability of phosphorus from thermo-chemically treated sewage sludge ashes as studied by ^{33}P labeling techniques. *Plant Soil* 377. 439-456.
49. Nanzer S., **Oberson A.**, Huthwelker T., Eggenberger U. and Frossard E. 2014. The molecular environment of phosphorus in sewage sludge ashes: implications for bioavailability. *J. Environ. Qual.* 43: 1050-1060.
50. Fonte S.J., Nesper M.G., Hegglin D.J., Velasquez J.E., Ramirez B., Rao I.M., Bernasconi S.M., Büinemann E.K., Frossard E. and **Oberson A.** 2014. Pasture degradation impacts soil phosphorus storage via changes to aggregate-associated soil organic matter in highly weathered tropical soils. *Soil Biol. Biochem.* 68: 150-157.
51. Annaheim K.E., Doolette A.L., Smernik R.J., Mayer J., **Oberson A.**, Frossard E. and Büinemann E.K. 2015. Long-term addition of organic fertilizers has little effect on soil organic phosphorus as characterized by P-31 NMR spectroscopy and enzyme additions. *Geoderma* 257: 67-77.

52. Bonvin C., Etter B., Udert K.M., Frossard E., Nanzer S., Tamburini F. and **Oberson A.** 2015. Plant uptake of phosphorus and nitrogen recycled from synthetic source-separated urine. *Ambio* 44: S217-S227.
53. Gasser M., Hammelele A., **Oberson A.**, Frossard E. and Mayer J. 2015. Quantitative evidence of overestimated rhizodeposition using N-15 leaf-labelling. *Soil Biol Biochem* 85: 10-20.
54. Nesper M., Büinemann E.K., Fonte S.J., Rao I.M., Velasquez J.E., Ramirez B., Hegglin D., Frossard E. and **Oberson A.** 2015. Pasture degradation decreases organic P content of tropical soils due to soil structural decline. *Geoderma* 257: 123-133.
55. Randriamanantsoa L., Frossard E., **Oberson A.** and Büinemann E.K. 2015. Gross organic phosphorus mineralization rates can be assessed in a Ferralsol using an isotopic dilution method. *Geoderma* 257: 86-93.
56. Udert K.M., Buckley C.A., Wächter M., McArdell C.S., Kohn T., Strande L., Zöllig H., Fumasoli A., **Oberson A.** and Etter B. 2015. Technologies for the treatment of source-separated urine in the eThekwini Municipality. *Water SA* 41: 212-221.
57. Traoré O.Y.A., Kiba D.I., Arnold M.C., Fliessbach A., Oberholzer H.R., Nacro H.B., Lombo F., **Oberson A.**, Frossard E. and Büinemann E.K. 2016. Fertilization practices alter microbial nutrient limitations after alleviation of carbon limitation in a Ferric Acrisol. *Biol Fertil Soils*, 52: 177-189.
58. Brod E., Øgaard A.F., Krogstad T., Haraldsen T.K., Frossard E. and **Oberson A.** 2016. Drivers of phosphorus uptake by barley following secondary resource application. *Frontiers in Nutrition* 3.
59. Frossard E., Buchmann N., Büinemann E.K., Kiba D.I., Lombo F., **Oberson A.**, Tamburini F. and Traoré O.Y.A. 2016. Soil properties and not inputs control carbon : nitrogen : phosphorus ratios in cropped soils in the long term. *SOIL* 2: 83-99.
60. Lemming C., **Oberson A.**, Hund A., Jensen L.S. and Magid J. 2016. Opportunity costs for maize associated with localised application of sewage sludge derived fertilisers, as indicated by early root and phosphorus uptake responses. *Plant and Soil* 406: 201-217.
61. Garland G., Büinemann E.K., **Oberson A.**, Frossard E. and Six J. 2016. Plant-mediated rhizospheric interactions in maize-pigeon pea intercropping enhance soil aggregation and organic phosphorus storage. *Plant and Soil*, 415: 37-55
62. Løes A.K., Büinemann E.K., Cooper J., Hörtenhuber S., Magid J., **Oberson A.** and Möller K. 2016. Nutrient supply to organic agriculture as governed by EU regulations and standards in six European countries. *Organic Agriculture*, 1-24.
63. Meyer G., Büinemann E.K., Frossard E., Maurhofer M., Mäder P. and **Oberson A.** 2017. Gross phosphorus fluxes in a calcareous soil inoculated with *Pseudomonas protegens* CHA0 revealed by ³³P isotopic dilution. *Soil Biology and Biochemistry* 104: 81-94.
64. Schneider K.D., Voroney R.P., Lynch D.H., **Oberson A.**, Frossard E. and Büinemann E.K. 2017. Microbially-mediated P fluxes in calcareous soils as a function of water-extractable phosphate. *Soil Biol Biochem* 106: 51-60

65. Möller K., **Oberson A.**, Büinemann E.K., Cooper J., Friedel J.K., Glæsner N., Hörtenhuber S., Løes A.-K., Mäder P., Meyer G., Müller T., Symanczik S., Weissengruber L., Wollmann I. and Magid J. 2018. Improved Phosphorus Recycling in Organic Farming: Navigating Between Constraints. *Advances in Agronomy* 147: 159-237.
66. Garland G., Büinemann E.K., **Oberson A.**, Frossard E., Snapp S., Chikowo R. and Six J. 2018. Phosphorus cycling within soil aggregate fractions of a highly weathered tropical soil: A conceptual model. *Soil Biol Biochem* 116: 91-98.
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68. Hammelhle A., **Oberson A.**, Lüscher A., Mader P. and Mayer J. 2018. Above- and belowground nitrogen distribution of a red clover-perennial ryegrass sward along a soil nutrient availability gradient established by organic and conventional cropping systems. *Plant Soil* 425: 507-525.
69. Cooper J., Reed E.Y., Hörtenhuber S., Lindenthal T., Løes A.-K., Mäder P., Magid J., **Oberson A.**, Kolbe H. and Möller K. 2018. Phosphorus availability on many organically managed farms in Europe. *Nutr Cycl Agroecosys* 110: 227-239.
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71. Lemming C., **Oberson A.**, Magid J., Bruun S., Scheutz C., Frossard E. and Jensen L.S. 2019. Residual phosphorus availability after long-term soil application of organic waste. *Agriculture, Ecosystems & Environment*: 270-271: 65-75.
72. Meyer G., Maurhofer M., Frossard E., Gamper H.A., Mäder P., Mészáros É., Schönholzer-Mauclaire L., Symanczik S. and **Oberson A.** 2019. *Pseudomonas protegens* CHA0 does not increase phosphorus uptake from 33P labeled synthetic hydroxyapatite by wheat grown on calcareous soil. *Soil Biol Biochem* 131: 217-228.
73. Nanzer S., **Oberson A.**, Eggenberger U. and Frossard E. 2019. Predicting Phosphate Release from Sewage Sludge Ash Using an Ion Sink Assay. *Journal of Environmental Quality* 48: 746-754.
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75. Hgaza K.V., **Oberson A.**, Kiba I.D., Diby L.N., Ake S. and Frossard E. 2020. The nitrogen nutrition of yam (*Dioscorea* spp). *J Plant Nutr* 43: 64-78.
76. Epper C., Paul B., Dhar Burra D., Phengsavanh P., Ritzema R., Syfongxay C., Groot J., Six J., Frossard E., **Oberson A.** and Douxchamps S. 2020. Nutrient flows and intensification options for smallholder farmers of the Lao uplands. *Agricultural Systems* 177.
77. Helfenstein J., Pistocchi C., **Oberson A.**, Tamburini F., Goll D.S. and Frossard E. 2020. Estimates of mean residence times of phosphorus in commonly-considered inorganic soil phosphorus pools, *Biogeosciences* 17: 441-454.

78. Raymond N., Gómez-Muñoz B., van der Bom F., Nybroe O., Stoumann Jensen L., Müller Stöver D., **Oberson A.** and Richardson A.E. 2020. Phosphate solubilising microorganisms for improved crop productivity: matter or myth? *New Phytol.* doi: 10.1111/nph.16924.
79. Traore O.I., Kiba D.I., Bünenmann E. and **Oberson A.** 2020. Nitrogen and phosphorus uptake from isotope-labelled fertilizers by sorghum and soil microorganisms. *Agrosystems, Geosciences & Environment*, DOI: 10.1002/agg2.20111.
80. Villegas D.M., Velasquez J., Arango J., Obregon K., Rao I.M., Rosas J. and **Oberson A.** 2020. Urochloa grasses swap nitrogen source when grown in association with legumes in tropical pastures. *Diversity* 12, 419; doi:10.3390/d12110419.
81. Chen H., Jarosch K.A., Mészáros É., Frossard E., Zhao X. and **Oberson A.** 2021. Repeated drying and rewetting differently affect abiotic and biotic soil phosphorus (P) dynamics in a sandy soil: A 33P soil incubation study. *Soil Biol Biochem* 153, 108079.
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83. Frick, H., **Oberson A.**, Frossard, E., Bünenmann, E.K., 2022. Leached nitrate under fertilised loamy soil originates mainly from mineralisation of soil organic N. *Agriculture, Ecosystems & Environment* 338, 108093.
84. Frick, H., **Oberson A.**, Cormann, M., Wettstein, H.R., Frossard , E., Bünenmann, E., 2022. Similar distribution of 15N labelled cattle slurry and mineral fertilizer in soil N after one year. *Nutr Cycl Agroecosyst.* 125, 153–169.
85. Stamm C., Binder C.R., Frossard E., Haygarth P.M., **Oberson A.**, Richardson A., Schaum C., Schoumans O. and Udert K. 2022. Inter- and transdisciplinary gaps to tackle current and future phosphorus challenges. *Ambio* 51, 611-622.
86. Senanayake R.L., **Oberson A.**, Weerakoon W., Egodawatta C.P., Nissanka S. and Frossard E., 2022. Influence of nitrogen and potassium inputs on plant biomass and nitrogen use efficiency of *Dioscorea alata*. *J Plant Nutr*, 1-23.
87. Hansen V., Müller-Stöver D., Gómez-Muñoz B., **Oberson A.** and Magid, J. 2022. Differences in cover crop contributions to phosphorus uptake by ryegrass in two soils with low and moderate P status. *Geoderma* 426, 116075.
88. Frossard E., Crain G., Giménez de Azcárate Bordóns I., Hirschvogel C., **Oberson A.**, Paille C., Pellegrini G. and Udert K.M. 2023. Recycling nutrients from organic waste for growing higher plants in the Micro Ecological Life Support System Alternative (MELiSSA) loop during long-term space missions. *Life Sciences in Space Research*<https://doi.org/10.1016/j.lssr.2023.08.005>.
89. Frick H., Efosa, N., **Oberson, A.**, Krause, H.-M., Nägele, H.-J., Frossard, E., and Bünenmann, E. K. Nitrogen dynamics after slurry application as affected by anaerobic digestion, biochar and a nitrification inhibitor. *Soil Use and Management* n/a<https://doi.org/10.1111/sum.12953>.

90. **Oberson A.**, Jarosch K.A., Frossard E., Hammelele A., Fließbach A., Mäder P. and Mayer J. 2023. Higher than expected: Nitrogen flows, budgets, and use efficiencies over 35 years of organic and conventional cropping. *Agriculture Ecosystems & Environment* (minor revisions)

Monographs

1. **Oberson A.** 1993. Phosphordynamik in biologisch und konventionell bewirtschafteten Böden des DOK-Versuchs. Ph.D. thesis Nr 10119 Swiss Federal Institute of Technology, Zurich, 171 p.
2. Stamp P., Liedgens M., **Oberson A.**, Schmid J.E., Soldati A. and Frossard E. 2002. Nachhaltiger Ackerbau in der Schweiz – eine Gratwanderung zwischen Ernährungssicherung und Umweltschutz. Neujahrsblatt Naturforschende Gesellschaft in Zürich (Hrsg.) 96 p.
3. Büinemann E.K., **Oberson A.** and Frossard E. 2011. Phosphorus in action – Biological processes in soil phosphorus cycling. Springer Soil Biology Series. Springer, Berlin Heidelberg, 483 p.

Book chapters

1. Tiessen H., Stewart J.W.B. and **Oberson A.** 1994. Innovative soil phosphorus availability indices: assessing organic phosphorus. In: Soil Science Society of America (Ed.) Soil testing: prospects for improving nutrient recommendations, SSSA Spec. Publ. 40: 143-162.
2. Jiménez J.J., Cepeda A., Friesen D.K., Decaëns T. and **Oberson A.** 2001. Phosphorus availability in casts of an anecic savanna earthworm in a Colombian Oxisol. In: Jiménez J. J. and Thomas R. J. (Eds.) Soil macroinvertebrate communities in the neotropical savannas of Colombia. CIAT, Cali, Colombia: 199-211.
3. Jiménez J.J., Cepeda A., Friesen D.K., Decaëns T. and **Oberson A.** 2003. Disponibilidad de fósforo en las heces de una especie anécica de lombriz de tierra de las sabanas de suelo Oxisol en Colombia. In: Jiménez J.J. and Thomas R.J. (Eds.) El arado natural: Las comunidades de macrovertebrados del suelo en las sabanas neotropicales de Colombia. CIAT, Cali, Colombia: 224-237.
4. **Oberson A.** and Frossard E. 2005. Phosphorus management for organic agriculture. In: Sims J.T. and Sharpley A.N. (Eds.) Phosphorus: Agriculture and the Environment. ASA, CSSA and SSSA, Madison, Wisconsin, USA: 761-779.
5. **Oberson A.** and Joner E.J. 2005. Microbial turnover of phosphorus in soil. In: Turner B.L. et al. (Eds.) Organic phosphorus in the environment. CAB International, Wallingford, Oxon, UK: 133-164.
6. Turner B.L., Frossard E. and **Oberson A.** 2006. Enhancing phosphorus availability in low-fertility soils. In: Uphoff N. et al. (Eds.) Biological approaches to sustainable soil systems. CRC Press, Boca Raton FL: 191-205.
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