

## A - Curriculum vitae

**CHABBI, Abad,**

Date of birth : 09.04.1964, Larache, Morocco ; Married, 1 child

Citizenship : Moroccan – German

Address :

**Nouvelle-Aquitaine-Poitiers Center**

Unité Pluridisciplinaire Prairies et Plantes Fourragères (P3F), Lusignan

**& INRAE Ile-de-France-Versailles**

UMR Joint research unit INRAE, AgroParisTech, Université Paris-Saclay

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### EDUCATION AND DEGREES/QUALIFICATION:

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- 2007** Habilitation thesis in Earth Science – Biogeochemistry, University Pierre & Marie Curie, Paris, France
- 1994** PhD thesis in Ecology, University of Bordeaux, Bordeaux, France
- 1989** DEA/Master thesis in Ecology, University of Bordeaux, France
- 1987** Master in Environment Science, University Mohamed ben Abdullah, Fes Morocco
- 1998 - 2012** Admission to National Qualifications Lists (CNU) as Professor of Universities - Section 35 (Earth Science and Biogeochemical Cycle)
- 2010** Ranked 2<sup>nd</sup> in the competition for the title of full Professor at the University of Orsay, France

### PROFESSIONAL ACTIVITY

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- 2023 - now** Adjunct professor, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil
- 2022 - now** Adjunct professor - Center of Plant-Soil Interaction and Natural Resources Biotechnology Scientific & Technological Bioresource Nucleus (BIOREN) Universidad de La Frontera Temuco- Chile
- 2020 - now** Adjunct professor- Institute of Resources, Ecosystem and Environment of Agriculture, Nanjing Agricultural University, Nanjing 210095 China
- 2019 - now** Research Director (DR1) INRAE, France
- 2014 - 2018** Research Director (DR2) INRAE, France
- 2011 - 2013** Researcher (CRCN), INRAE Lusignan, France
- 2004 - 2010** Engineer, INRAE Lusignan Paris, France
- 2003 - 2004** Researcher at the University Pierre and Marie Curie, Paris, France
- 1997 - 1998** Research study leave at the Louisiana State University (LSU), Baton Rouge, USA
- 1996 - 2002** Assistant Professor, BTU, Cottbus, Germany
- 1995 - 1996** Postdoc, BTU, Cottbus, Germany
- 1994 - 1995** Senior Consultant at the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Bonn, Germany

### COORDINATION ACTIVITY/GROUP LEADER

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- 2017 - now** Paris Soil organic matter research Group (PSG) <https://psgresearch.wordpress.com/>
- 2016** International scientific delegate of research infrastructure (INRAE - Mandate of the Directorate General for scientific affairs)
- 2009 - now** National Scientific Coordinator (PI) of the SOER-ACBB - <http://www.soere-acbb.com/>
- 2009 - 2011** Coordination of the implementation of Pan European infrastructure (PI) within the ESFRI framework (convincing 25 National Program committee)
- 2004 - 2010** Group leader, INRA Lusignan, France
- 1999 - 2002** Group leader 'soil water interfaces', BTU, Cottbus, Germany

### AWARDS

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- 2021 - 2024** Individual Research excellence award (RIPEC C3)
- 2017 - 2020** Scientific Government Award for Excellence in Doctoral Supervision & Research
- 14-21/08/2002** Best presentation Award « 17<sup>th</sup> world congress of soil science », Bangkok, Thailand
- 1-5/04/ 2001** Best presentation Award of « 221<sup>st</sup> American Chemical Society National Meeting », San Diego, California, USA

## PUBLICATIONS & PRESENTATIONS

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**102** international publications (peer-reviewed journals (WOS); **16** book chapters; **>55** invited oral/plenary presentations at the National and International levels, including the European Commission, French embassies (e.g., Germany and USA), & the French National Assembly). **H-index : 41**.

## Supervision/Co-supervision of students/post-docs/engineering staff

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**18** Masters, **13** doctorats, **10** Post-docs & **6** staff/engineers

## CONFERENCE CHAIR

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Chair/Co-chair : **22** sessions/workshops/symposiums & Chair of **2** strategic international conferences :

- Organic Matter Dynamics in Agro-ecosystems”, Poitiers, France 2007
- Food security and climate change : 4 per 1000 initiative new tangible global challenges for the soil Poitiers, France, Potiers, France 2019

## EDITORIAL SERVICE

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- **Editor of two books** (CABI International & CRC Taylor and Francis group)
- **Guest/Co-editor in Chief** of **10** Special issue journals (peer reviewed journals (WOS))
- **2024 - now** : Editorial Board member of « Soil Advances »
- **2022 - now** : Associated Editor of « European Journal of soil Science »
- **2020 - now** : Section Chief Editor of « Frontiers in soils Science »
- **2017 - now** : Editorial Board member of « Agronomy MDPI »
- **2010 - 2015** : Associated Editor of « AoB PLANTS », Oxford
- **2005 - 2011** : Member of the editorial committee of « Journal Water Air and Soil Pollution » Springer
- **1995 - now** : Reviewer of >35 journals (including Nature Climate Change, Nature Communications, Biogeosciences, Global Change Biology, *Nature Sustainability*, Environmental Science & Technology ...)

## COMMITTEES & TASK FORCES

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**2020- now** : Expert Member at the « Swiss National Science Foundation (SNSF) », Switzerland.

**2018- now** : Member of the doctoral school at the University of Poitiers, France.

**2018- 2021** : Expert Member at the “Academy of Finland Grant Review, Finland”.

**2017- now** : Membre Expert /Chair at the “Canada Foundation for Innovation, Canada”, Canada.

**2017- 2020** : Member at the “National Ecological Observatory Network |NEON”, Boulder, Colorado, USA.

**2017** : Expert Member at the « EIP-AGRI Focus Group Grazing for carbon », European Commission

**2016** : Expert Member at the NSF “Assessment of the NEON RIs, USA”.

**2015** : Expert Member at the “**DG Research & Innovation**”, European Commission & Membre Expert DG “**Agriculture and Rural Development**”, European Commission.

**2014** : Expert Member at the “Scientific Advisory Committee of the Evaluation of Pertinence & Impact of Research Infrastructure Activity in FP7” – European Commission DG Research and innovation, Brussels.

**2013-now** : Evaluation of researchers & tenure track career advancement at the international level.

**2013** : Expert member of the working group's scientific committee “Towards a Roadmap for Biodiversity & Ecosystem research in Europe” - European Commission DG Research and innovation, Brussels.

**2013-2016** : Chair of the 'C2' component of the Ecosystem Task of the GEO (Group on Earth Observations).

**2012-now** : Membre Expert at the DFG, German Research Foundation.

**2012-2013** : Expert Member/Chair of the evaluation commission “*Hercules Foundation* for Investments in Research & Innovation”, Brussels, Belgium.

**2011-2016** : Expert Member at the NERC & BBSRC, UK.

**2011-2015** : Expert Member of the ICOS infrastructure (Integrated Carbon Observatory System) executive committee, France.

**2010-2014** : Membre Expert at the « FAO/IAEA Division of Nuclear Techniques in Food and Agriculture ». Viena, Austria.

**2009-now** : Expert Member of the Chinese Academy of Sciences, Beijing, China.

**2008**: Membre Expert of the « Assessment committee of Padova University, Italy », Italy.

## FUNDING RECORD (~16 MILLION EUROS):

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- Principal coordinator of two European projects & **10** National Projects (ANR, ADEM, Region)
- Participation (Work package/tasks leader) in **8** European/international projects, **5** national.

## B - Publications (peer-reviewed journal)

The names underlined in yellow correspond to those of supervised or co-supervised students / postdocs

### 2024

1. JERRAY, A., RUMPEL, C., LE ROUX, X., MASSAD, R.S., **CHABBI, A.** (2024) N<sub>2</sub>O emissions from cropland and grassland management systems are determined by soil organic matter quality and soil physical parameters rather than carbon stock and denitrifier abundances. *Soil Biology & Biochemistry*, Volume 190, March 2024, 109274 <https://doi.org/10.1016/j.soilbio.2023.109274>
2. HU, T., SPARKLE, L.M., RUMPEL, C., **CHABBI, A.** (2024) Maximizing soil organic carbon stocks through optimal ploughing and renewal strategies in (Ley) grassland. *Communications Earth & Environment*, *Communications Earth & Environment* | (2024) 5:38 | <https://doi.org/10.1038/s43247-024-01202-3> | [www.nature.com/commsenv](http://www.nature.com/commsenv)

### 2023

3. DERRIEN, D., BARRÉ, P., BASILE-DOELSCH, I., CÉCILLON, L., **CHABBI, A.**, CRÈME, A., FONTAINE, S., HENNERON, L., JANOT, N., LASHERMES, G., QUÉNÉA, K., REES, F., DIGNAC, M-F. (2023) Current controversies on mechanisms controlling carbon storage in soils; implications for interactions with practitioners and policy-makers. A review. *Agronomy for Sustainable Development*, 43, 21. <https://doi.org/10.1007/s13593-023-00876-x>.
4. GILMULLINA, A., RUMPEL, C., BLAGODATSKAYA, G., KLUMPP, K., BERTRAND, I., DIPPOLD, M.A., **CHABBI, A.** 2023. Is plant biomass input driving soil organic matter formation processes in grassland soil under contrasting management? *Science of the Total Environment*, 893, 164550. <http://dx.doi.org/10.1016/j.scitotenv.2023.164550>.
5. KHAN, MD. Z., **CHABBI, A.**, HICKS PRIES, C.E., TORN, M.S. & RUMPEL, C. (2023) Management impacts on whole soil warming responses of CO<sub>2</sub> production and efflux in temperate climate. *Geoderma*, 440, 116725. <https://doi.org/10.1016/j.geoderma.2023.116725>.
6. MINASNY, B., MCBRATNEY, A.M., ARROUAYS, D. **CHABBI, A.**, FIELD, D.J., KOPITKE, P.M., MORGAN, C.S., PADARIAN, AND RUMPEL, C. (2023) Soil Carbon Sequestration: Much More Than a Climate Solution. *Environmental science and technology* <https://doi.org/10.1021/acs.est.3c07312>.
7. PUCHE, N.J.B., KIRSCHBAUM, M.U.F., VIOVY, N., **CHABBI, A.** (2023) Impacts of climate change on carbon and water fluxes, productivity and SOC of mowed and grazed grasslands in France. *PLOS ONE* <https://doi.org/10.1371/journal.pone.0283370>.

### 2022

8. **CHABBI, A.**, RUMPEL, C., HAGEDORN, F., SCHRUMPF, M. AND BAVEYE, PH. (2022) Editorial: Carbon Storage in Agricultural and Forest Soils. *Frontiers in Environmental Sciences*, 10, 848572 doi : 10.3389/fenvs.2022.848572
9. DENARDIN, L.G., MARTINS, A.P., FLORES, J.P., ALVES, L.A., PIRES, C.B., MACHADO, D.R., ANGHINONI, I., CARVALHO, P.C., KUZUYAKOV, Y., RICE, C.W, **CHABBI, A.** (2022) Fertilization effects on soil microbial composition and nutrient availability in integrated rice-livestock production systems. *Applied Soil Ecology*, 174, 104420. <https://doi.org/10.1016/j.apsoil.2022.104420>.
10. HU, T., **CHABBI, A.** (2022) Grassland management and integration during crop rotation impact soil carbon changes and grass-crop production. *Agriculture, Ecosystems and Environment* 324, 107703.
11. MINASNY, B., ARROUAYS, D., CARDINAEL, R., **CHABBI, A.**, FARREL, M., HENRY, B., KOUTIKA, L-S., LADHAK, J.K., MCBRATNEY, A.B., PADARIANA, J., DOBARCO, R.M., RUMPEL, C., SMITH, P., SOUSSANAN, J-F., (2022) Current NPP cannot predict future soil organic carbon sequestration potential. Comment on “Photosynthetic limits on carbon sequestration in croplands” *Geoderma*, 424, 115975. <https://doi.org/10.1016/j.geoderma.2022.115975>.
12. ROMDHANE, S., SPOR, A., BANERJEE, S., BREUIL, M-CH., BRU, D., **CHABBI, A.**, HALLIN, S., VAN DER HEIJDEN, MGA., SAGHAI, A., PHILIPPOT, L. (2022) Land-use intensification differentially affects bacterial, fungal and protist communities and decreases microbiome network complexity. *Environmental Microbiome*, 17:1 <https://doi.org/10.1186/s40793-021-00396-9>.
13. SOMAVILLA, A., CANER L., SILVA I.C.B, RHEINHEIMER D.S. & **CHABBI, A.** (2022) Phosphorus stock depletion and Soil C:N:P Stoichiometry under Annual crop rotations and grassland Management systems over 13 Years. *Frontiers in Soil Science* 2:863122. doi: 10.3389/fsoil.2022.863122.

## 2021

14. **CHABBI, A.**, KÖGEL-KNABNER, I., RUMPEL, C. (2021) Soil science in transition-(re)-defining its role under the global 4 per 1000 initiative. *Geoderma* 385, 114891 <https://doi.org/10.1016/j.geoderma.2020.114891>.
15. **GILMULLINA, A.**, RUMPEL, KLUMPP, K., **CHABBI, A.**, (2021) Do grassland management practices affect soil lignin chemistry by changing the composition of plant-derived organic matter input ? *Plant and soil* 469 : 443–455. <https://doi.org/10.1007/s11104-021-05174-7>
16. HOFFNER, K., BEYLICH, A., **CHABBI, A.**, CLUZEAU, D., DASCALU, D., GRAEFE, U., GUZMAN, G., HALLAIRE, V., HANISCH, J., LANDA, B.B., LINSLER, D., MENASSERI, S., ÖPIK, M., POTTHOFF, M., SANDOR, M., SCHEU, S., SCHMELZ, R.M., ENGELL, I., SCHRADER, S., VAHTER, T., BANSE, M., NICOLAÏ, A., PLAAS, E., RUNGE, T., ROSLIN, T., DECAU, M-L., SEPP, S.-K., ARIAS-GIRALDO L. F., ROUCAUTE, M., PERES, G. (2021) Legacy effects of temporary grassland in annual crop rotation on soil ecosystem services. *Science of the Total Environment*, 780, 146140. DOI : 10.1016/j.scitotenv.2021.146140.
17. **HU, T.**, **CHABBI, A.** (2021) Does the higher root carbon contribution to soil under cropping cycles following grassland conversion also increase shoot biomass ? *Science of the Total Environment* 752, 141684 <https://doi.org/10.1016/j.scitotenv.2020.141684>.
18. RUMPEL, C. & **CHABBI, A.** (2021) Managing soil organic carbon for mitigating climate change and increasing food security. *Agronomy*, 11, 1553. <https://doi.org/10.3390/agronomy11081553>.
19. **SOMAVILLA, A.**, MARQUES, A.C.M., RHEINHEIMER DOS SANTOS, D., DE QUADROS, F.L.F., CANER, L., DE OLIVEIRA, L.B., **CHABBI, A.**, TIECHER, T. (2021) Phosphate fertilization and liming in trial conducted over 21 years : a survey for greater forage production and Pampa pasture conservation. *European Journal of Agronomy*, 125, 126259. <https://doi.org/10.1016/j.eja.2021.126259>.

## 2020

20. AMELUNG\*, W., BOSSIO, D., DE VRIES, W., KÖGEL-KNABNER, I., LEHMANN, J., AMUNDSON, R., BOL, R., COLLINS, C., LAL, R., LEIFELD, J., MINASNY, B., PAN, G., PAUSTIAN, K., RUMPEL, C., SANDERMAN, J., VAN GROENIGEN, J.W., MOONEY, S., VAN WESEMAEL, B., WANDER, M., **CHABBI, A.\* (\*leadauthors)** (2020) Towards Implementing a Global-scale Soil Climate Mitigation Strategy. *Nature Communications* 11, 5427 <https://doi.org/10.1038/s41467-020-18887-7>.
21. **ARNUTI, F.**, **DE OLIVEIRA DENARDIN, L.G.**, DE A NUNES, P.A., ALVES, L.A., CECAGNO, D., DE ASSIS, J., SCHAIDHAUER, W. DA S., ANGHINONI, I., **CHABBI, A.**, CARVALHO, P.C. DE F. (2020) Sheep dung composition and phosphorus and potassium release affected by grazing intensities and pasture development stages in an integrated crop-livestock system. *Agronomy* 2020, 10, 1162 ; doi :10.3390/agronomy10081162.
22. BELLOCCHI, G., **CHABBI, A.** (2020) Grassland Management for Sustainable Agroecosystems. *Agronomy*, 10 (1): 1-5, 78; doi:10.3390/agronomy10010078.
23. **CREME, A.**, RUMPEL C., MALONE, S.L., SABY N., GASTAL, F., VAUDOUR, E., DECAU, M.L., **CHABBI, A.** (2020) Monitoring grassland management effects on soil organic carbon – a matter of scale. *Agronomy MDPI* 2020, 10, 2016 ; doi:10.3390/agronomy10122016.
24. **DE OLIVEIRA DENARDIN, L.G.**, MARTINS, A.P., BASTOS, L.M., CIAMPITTI, I.A., ANGHINONI, I., MOOJEN, F.G. CARVALHO, P.C. DE F. HUANG, M., **CHABBI, A.** (2020) Integrating livestock and soybean in no-till rice paddy fields improves soil fertility and decreases yield reliance on mineral fertilizer. *Agronomy- Agronomy* 2020, 10, 1371 ; doi :10.3390/agronomy10091371.
25. **GILMULLINA, A.**, RUMPEL, C., BLAGODATSKAYA, E., **CHABBI, A.** (2020) Management of grasslands by mowing versus grazing – Impacts on soil organic matter quality and microbial functioning. *Applied Soil Ecology* 156 (2020) 103701.
26. KIRSCHBAUM, M., **PUCHE, N.**, GILTRAP, D. L., LIANG, L.L., **CHABBI, A.** (2020) Combining eddy covariance measurements with process-based modelling to enhance understanding of carbon exchange rates of dairy pastures. *Science of the Total Environment* 745, 140917. <https://doi.org/10.1016/j.scitotenv.2020.140917>
27. LOUARN, G., **CHABBI, A.**, GASTAL, F. (2020) Nitrogen concentration in the upper leaves of the canopy (Nup) is a reliable indicator of plant N nutrition both in pure and mixed grasslands. *Grass & Forage Science*, 75(1), 127-133.
28. MOINET, G.Y.K., MOINETA, M., HUNT, J.E., RUMPEL, C., **CHABBI, A.**, MILLARD, P. (2020) Temperature sensitivity of decomposition decreases with increasing soil organic matter stability. *Science of the Total Environment* 704, 135460. <https://doi.org/10.1016/j.scitotenv.2019.135460>.

29. **PANETTIERI, M.**, COURTIER-MURIAS, D., RUMPEL, C., DIGNAC, M-F. ALMENDROS, G., **CHABBI, A.** (2020) : Land-use perturbations in ley grassland decouple the degradation of ancient soil organic matter from the storage of newly derived carbon inputs. *SOIL*, 6, 435–451, <https://doi.org/10.5194/soil-6-435-2020>, 2020.

## **2019**

30. **MOINET, G.Y.K.**, MIDWOOD, A.J., HUNT, J.E., RUMPEL, C. MILLARD, P., **CHABBI, A.** (2019) Grassland management influences the response of soil respiration to drought. *Agronomy*, MDPI, 2019, 9 (3), pp.124-10.3390/agronomy9030124. hal-02065665.
31. **PUCHE, N.**, SENAPATI, N., FLECHARD, C.R., KLUMPP, K., KIRSCHBAUM, M.U., **CHABBI, A.** (2019) Modeling Carbon and Water Fluxes of Managed Grasslands : Comparing Flux Variability and Net Carbon Budgets between Grazed and Mowed Systems. *Agronomy* 2019, 9, 183.

## **2018**

32. CLOBERT, J. CHANZY, A., LE GALLIARD, J-F., **CHABBI, A.**, GREIVELDINGER, L., CAQUET, T., LOREAU, M., MOUGIN, C., PICHOT, C., ROY, J., & SAINT-ANDRE, L. (2018) How to integrate experimental research approaches in ecological and environmental studies : AnaEE France as an example. *Frontiers in Ecology and Evolution*, 6 :43. <https://doi.org/10.3389/fevo.2018.00043>.
33. **CREME, A.**, RUMPEL, C., LE ROUX, X., ROMIAN, A., LAN, T., **CHABBI, A.** (2018) Ley grassland under temperate climate had a legacy effect on soil organic matter quantity, biogeochemical signature and microbial activities. *Soil Biology and Biochemistry* 122, 203–210.
34. FARES, S., CONTE, A., **CHABBI, A.** (2018) Ozone flux in plant ecosystems : new opportunities for long-term monitoring networks to deliver ozone risk assessments. *Environmental Science and Pollution Research* 25 : 8240. <https://doi.org/10.1007/s11356-017-0352-0>.
35. MARON, P.M., AMADOU S., KAISERMANN, A., LEVEQUE J., MATHIEU O., GUIGUE J., BATTLE, K., BERNARD L., DEQUIEDT, S., TERRAT, S., **CHABBI, A.**, RANJARD L. (2018) High microbial diversity promotes soil ecosystem functioning. *Applied and Environmental Microbiology*, DOI : 10.1128/AEM.02738-17.
36. RUMPEL, C. LEHMANN, L & **CHABBI, A.** (2018) ‘4 per 1,000’ initiative will boost soil carbon for climate and food security. *Correspondence - Nature*, 553, 27.
37. **SENAPATI, N.**, **CHABBI, A.**, SMITH, P. (2018) Modelling daily to seasonal carbon fluxes and annual net ecosystem carbon balance of cereal grain-cropland using DailyDayCent : A model data comparison. *Agriculture, Ecosystems and Environment*, 252, 159–177.

## **2017**

38. **CHABBI, A.**, LOESCHER, H.L. (2017) The lack of alignment among environmental research infrastructures may impede scientific opportunities. *Challenges*, 8(2), 1-8 doi : 10.3390/challe8020018.
39. **CHABBI, A.**, LEHMANN, L., CIAIS, P., LOESCHER, H.L., COTRUFO, M.F., DON, A., SAN-CLEMENTS, M. SCHIPPER, L., SIX, J., SMITH, P. AND RUMPEL, C. (2017) Aligning agriculture and climate policy. *Nature Climate Change*, 7, 307-309.
40. **CHABBI, A.**, LOESCHER, H.L., DILLON M.S. (2017) Integrating environmental science and the economy : innovative partnerships between the private sector and research infrastructures. *Frontiers in Environmental Science*, 5 :49 doi : 10.3389/fenvs.2017.00049.
41. **CREME, A.**, **CHABBI, A.**, GASTAL, F., RUMPEL, C. (2017) Biogeochemical nature of grassland soil organic matter under plant communities with two nitrogen sources. *Plant & Soil*, 415, 189-201.
42. **PANETTIERI, M.**, RUMPEL, C., DIGNAC, M.-F., **CHABBI, A.**, (2017) Does grassland introduction into cropping cycles affect carbon dynamics through changes of allocation of soil organic matter within aggregate fractions ? *Science of the Total Environment*, 576, 251-263.

## **2016**

43. ANDRIUZZI WS., NGOC, P-T., GEISEN, S., KEITH, AM., DUMACK, K., THOMAS BOLGER., BONKOWSKI, M., BRUSSAARD, L., FABER, J.H., **CHABBI, A.**, RUMPEL C., SCHMIDT, O. (2016) Organic matter composition and the protist and nematode communities around anecic earthworm burrows, *Biology and Soil Fertility*, 52, 91–100.
44. **ARMAS-HERRERA C.M.**, DIGNAC M.-F., RUMPEL, C., ARBELO, C.D., **CHABBI, A.** (2016) Land use changes affect the dynamics of cutin and suberin biomarkers in a grassland soil. *European Journal of Soil Science*, 67, 360-373.

45. CARDENAS, L.M., COLLINS, A.L., DUNGAIT J.A.J., HAWKINS, J., **CHABBI, A.**, HAWES, C. (2016) The contribution of farm-scale experiments to the understanding of soil processes and implications for ecosystem services. *European Journal of Soil Science*, 67 (4), 359.
46. **CREME, A.**, RUMPEL, C., GASTAL, F., **CHABBI, A.** (2016) Effect of nitrogen fertilizer replacement by legume on organic matter and phosphorus forms in grassland soil. *Plant and Soil*, 402, 117-128.
47. GRIFFITHS, B.S., RÖMBKE, J., SCHMELZ, R.M., SCHEFFCZYK, A., FABER, J., BLOEM, J., PERES, G., CLUZEAEU, D., **CHABBI, A.**, SUHADOLC, M., SOUSA, J.P., MARTINS, DA SILVAH, CARVALHO, F., MENDES, S., MORAIS, R. PEREIRA, FRANCISCO, BONKOWSKI, C. M., GEISENI, S., BARDGETT, R.D. DE VRIES, F.T., BOLGER, T., DIRILGENK, SCHMIDT, O., WINDING, A., HENDRIKSEN, N.B. A. JOHANSEN, PHILIPPOTN, L., PLASSART, P., BRUN, D., THOMSON, B., GRIFFITHS, R.I., KEITH, K., RUTGERS, M., MULDER, C., HANNULA, S.E. CREAMER, R., STONE, S. (2016) Selecting cost effective and policy-relevant biological indicators for European monitoring of soil biodiversity and ecosystem function. *Ecological Indicators*, 69, 213-223.
48. **SANAULLAH, M.**, **CHABBI, A.**, MARON, P.-A., BAUMANN, K., TARDY, V., BLAGODATSKAYA, C., KUZYAKOV, Y. AND RUMPEL, C. (2016) How do microbial communities at different soil depths respond to root litter addition under field conditions ? *Soil Biology & Biochemistry*, 103, 28-38.
49. **SENAPATI, N.**, **CHABBI, A.**, GIOSTRI, A., YELURIPATI, JB., SMITH, P. (2016) MODELLING Nitrous oxide emissions from mown-grass and grain-cropping systems : Testing and sensitivity analysis of DailyDayCent using high frequency measurements. *Science of the Total Environment*, 572, 955-977.
50. **SENAPATI, N.**, JANSSON, P-E, SMITH, P., **CHABBI, A.** (2016) Modelling heat, water and carbon fluxes in mown grassland under multi-objective and multi-criteria constraints. *ENVIRONMENTAL MODELLING & SOFTWARE*, 80, 201-224.

## **2015**

51. **CHABBI, A.**, SENAPATI N., GIOSTRI A., VERTES F., CARROZI M. LEMAIRE G., GASTAL F., RECOUS S., KLUMPP K., MASSAD R.S., RUMPEL, C. (2015) Performances des rotations à base de cultures fourragères en termes de gaz à effet de serre (GES) et bilan de carbone. *Fourrages*, 223, 241-248.
52. DE BOECK, H.J VICCA, S., ROY, J., NIJS, I, MILCU, M., KREYLING, J., JENTSCH, A., **CHABBI, A.**, CAMPIOLI, M., CALLAGHAN, T. BEIERKUHNLEIN, C., BEIER, C. (2015) Global change experiments : challenges and opportunities. *Bioscience* 65(9), 922-931.
53. LEMAIRE, G., GASTAL, F., FRANZLUEBBERS, A., **CHABBI, A.** (2015) Grassland-cropping rotations : An avenue for agricultural diversification to reconcile high production with environmental quality. *Environmental Management*, 65(5), 1065-1077.
54. NAISSE, C., GIRARDIN, C., DAVASSE, B., **CHABBI, A.**, RUMPEL, C. (2015) Effect of biochar addition on C mineralisation and soil organic matter priming in two subsoil horizons. *Journal of Soils and Sediments* 15, 825-832.
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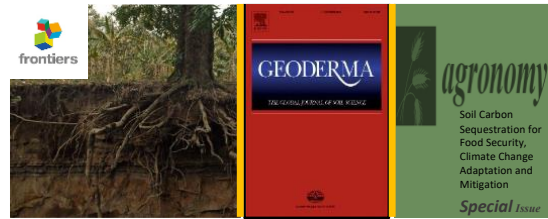
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