



GLOBAL
RESEARCH
ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

CROPLANDS RESEARCH GROUP: Argentina Update



CRG representatives:
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Activities/Accomplishment since last meeting

- Country Update (*e.g. communications, meetings, workshops, funding applications, participation in Flagships or other GRA activities etc.*)

Publications:

Liebig, M.A., Franzluebbers, A.J., Alvarez, C. [et al.] (2016) MAGGnet: An international network to foster mitigation of agricultural greenhouse gases, *Carbon Management*, 7:3-4, 243-248, DOI: 10.1080/17583004.2016.1180586 To link to this article: <https://doi.org/10.1080/17583004.2016.1180586>

Chalco Vera, J., Valeiro,, A., Posse, G., Acreche, M.M. 2017. To burn or not to burn: The question of straw burning and nitrogen fertilization effect on nitrous oxide emissions in sugarcane. *Science of the Total Environment* 587–588, 399–406). <https://doi.org/10.1016/j.scitotenv.2017.02.172>

- Cosentino, V.R.N., Minervini M.G., Taboada, M. A. 2017. Influence of stubble quality and degree of soil-stubble contact on N₂O emission. *Plant and Soil Environment* 63 (7), 289-294 doi: 10.17221/499/2016-PSE.
- Castesana, P. S.; Dawidowski, L.E.; Finster, L.; Gómez, D.R.; Taboada, M.A. 2018. Ammonia emissions from the agriculture sector in Argentina; 2000–2012. *Atmospheric Environment* 178, 293-304. <https://doi.org/10.1016/j.atmosenv.2018.02.003>
- Lewczuk, N.A., Posse, G., Richter, K., Achkar, A. 2017. CO₂ and N₂O flux balance on soybean fields during growth and fallow periods in the Argentine Pampas—A study case. *Soil and Tillage Research* 169, 65-70. <https://doi.org/10.1016/j.still.2017.01.017>

Doctoral Thesis

Carlos Piccinetti, National University of Luján. “N₂O emission from Crop sequences with different participation of soybean under no till farming.

Jorge Chalaco Vera (National University of Tucumán). GHG Emissions from sugar cane fields in Tucumán province, Argentina: Influence of Straw burning and N fertilization. 2018. Advisors: Gabriela Posse and Martín Acreche.

- Gregorutti, V.C., Caviglia, O.P. 2017. Nitrous oxide emission after the addition of organic residues on soil surface. *Agriculture, Ecosystems and Environment* 246, 234–242.
<https://doi.org/10.1016/j.agee.2017.06.016>

Presentations in Congresses and Workshops

Difussion publications

Opportunities and plans

- Flagships:

Sustainable intensification of livestock systems with legumes: Latin American and Caribbean cooperation platform (2018-2020).

Countries: Argentina, Brazil, Chile, Ecuador, Nicaragua, Paraguay, Dominican Republic, Uruguay

Main activities: BNF by legumes in grazed livestock systems, impact of soil Carbon, GHG (N₂O and CH₄) emissions

Funding: PROCISUR, FONTAGRO, New Zealand gov.

OECD: The Organization for Economic Co-operation and Development

- Since 2018 the Argentine Agroindustry Ministry along with INTA are collaborating in the update of the Nitrogen and Phosphorus balance of soils destined to livestock and croplands.
- Experts of different points of the Argentinian croplands area (Buenos Aires, Santa Fe, Córdoba, Entre Ríos) are working together with technicians of the OCDE in order to reach that objective.

Thanks!