GLOBAL RESEARCH ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

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METHANE FEED ADDITIVES FLAGSHIP PROJECT

(funding received from Global Dairy Platform: 2 years postdoc contract)



Situation/Issue

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- Feed additives are a valuable strategy to reduce methane emissions from ruminants
- Increasing interest in developing feed additives
- Despite the extensive research effort over the last decades, few additives are available in the market



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Flagship Project Goal(s)

 Facilitate the development and use of feed additives to reduce enteric methane emissions

 Improve academic and industry capability to develop feed additives and contribute to efficacy assessment



Anticipated Flagship Outcomes/Impacts

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Technical guidelines and protocols on good practice on how to develop and <u>test</u> feed additives, as well as for <u>accounting</u> for the effect of using this mitigation strategy

Global network of experts to share knowledge and create detailed guidance to enable the livestock sector to collaboratively harness the potential that feed additives offer

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Flagship Project Partners

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53 Members from 22 countries from: Asia Europe North America Latin America Oceania

WG1	WG2	WG3
Wang M. Carro M.D., Fievez V., Joch M. Terranova M.	Battelli M., Kenny D., Lind V., Meo Zilio D., Peiren N., Ran Rapetti L., Schwarm A., Stergiadis S., Theodoridou K., Gastelen S., Waters S. Lund, P.	
Benchaar C. Durmic Z., Carbone V., Muetzel S. Belanche A., Yáñez-Ruiz D.R. Bannink A Garcia F., Ungerfeld E. Duin E., Hristov A.	Cajarville C., Fernandez Turren G., Muñoz C. Hristov A., Ramirez Agudelo F. Jonker A., Meale S., Pacheco D. Bannink A., Belanche A. Yáñez-Ruiz D.R. Garcia F., Ungerfeld E.	Bannink A. Hristov A. <mark>Vibart R.</mark> Bannink A., Belanche A. Yáñez-Ruiz D.R. Garcia F
WG4	WG5	WG6
Belanche A., Godoy Santos F., Huws S., Jeyanathan J., Morgavi D. Guan L., McAllister T., Pitta D. Denman S., Muetzel S. Dijkstra J., Yáñez-Ruiz D.R., Bannink A. Garcia F., Ungerfeld E.	Newbold J. Van der Saag M., Waite J. Tricarico, J. Yáñez-Ruiz D.R., Bannink A. Garcia F	Faverin F., Henrique F., Leite F., Lopes da Silva A. Bilotto F., Mazzetto A., Ridoutt B., Winslow E. Del Prado A., Bannink A., Dijkstra J., Yáñez- Ruiz D.R.



Activities/Results To Date

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Special issue agreed with	Journal of Dairy Science [®]	to b	e published in autumn 2024
Guidelines comprising 6 invited manuscripts	Official Journal of the American Dairy Science Association®		Status
1 - Recommendations for identification and selection of bioactive compounds to develop anti- methanogenic feed additives			Being reviewed R1
2. RECOMMENDATIONS FOR TESTING ENTERIC METHANE-MITIGATING FEED ADDITIVES IN ANIMAL STUDIES			Accepted
3. MODELING THE IMPACT OF FEED ADDITIVES ON ENTERIC METHANE EMISSION OF RUMINANTS: APPROACHES AND RECOMMENDATIONS			Being reviewed R2
4. A Guideline to Uncover the Mode of Action of Anti-Methanogenic Feed Additives for Ruminants			Accepted
5. Registration and regulation of feed additives			Accepted
6. Accounting at Farm, Regional, National or Global level			Being reviewed R1

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Opportunities to get involved

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Webinars and dissemination activities to present and discuss the content of the guidelines are being planned towards the end of 2024