



HAL
open science

Sm@RT: main lessons from New Zealand on PLF uptake in small ruminants

Jean-Marc Gautier, Claire Morgan Davies, L. Depuille, Anne McLaren, Bríd Mclearn, Lise Grøva, P. Piirsalu, Valeria Giovanetti, Ilan Halachmi, A. Bar Shamai, et al.

► **To cite this version:**

Jean-Marc Gautier, Claire Morgan Davies, L. Depuille, Anne McLaren, Bríd Mclearn, et al.. Sm@RT: main lessons from New Zealand on PLF uptake in small ruminants. 74th Annual Meeting of the European Federation of Animal Science, EAAP/WAAP, Aug 2023, Lyon, France. pp.780, 10.3920/978-90-8686-936-7 . hal-04195818

HAL Id: hal-04195818

<https://hal.inrae.fr/hal-04195818>

Submitted on 4 Sep 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Book of Abstracts of the 74th Annual Meeting of the European Federation of Animal Science



**Book of abstracts No. 29 (2023)
Lyon, France
26 August – 1 September, 2023**

Book of Abstracts of the 74th Annual Meeting of the European Federation of Animal Science

Lyon, France, 26 August – 1 September, 2023



EAAP Scientific Committee:

F. Miglior
L. Pinotti
L. Boyle
D. Kenny
M. Lee
M. De Marchi
V.A.P. Cadavez
S. Millet
R. Evans
L. Gasco
M. Pastell
G. Pollott (secretary)
H. Spoolder (chair)



Session 68

Use of innovative and precision tools in research stations with small ruminants: the INRAE case

I. Llach¹, H. Caillat², A. Fatet², S. Breton³, T. Aguirre-Lavin⁴, D. Dubreuil⁴, A. Eymard⁵, J. Boucherot⁶, T. Fassier⁶, D. Marcon⁶, S. Parisot⁷, C. Durand⁷, G. Bonnafe⁷, D. Portes⁷, C. Morgan-Davies⁸ and E. González-García¹

¹INRAE, UMR SELMET, 34060 Montpellier, France, ²INRAE UE1373 FERLus, Les Verrines, 86600 Lusignan, France, ³INRAE, UE1277 PFIE, 37380 Nouzilly, France, ⁴INRAE UE1297 PAO, CR Tours, 37380 Nouzilly, France, ⁵INRAE UMR0791 MoSAR Chèvrerie expérimentale, Route de la ferme, 78850 Thiverval-Grignon, France, ⁶INRAE UE0332 P3R, La Sapinière, 18390 Osmoy, France, ⁷INRAE, UE0321 La Fage, 12250 Roquefort-sur-Soulzon, France, ⁸SRUC, West Mains Road, EH9 3JG Edinburgh, United Kingdom;

eliel.gonzalez-garcia@inrae.fr

An extensive survey was carried out in experimental units (EU) of INRAE using small ruminants (SR), to get insights in current and historical uses of innovative technologies in their facilities, and staff viewpoints. Ten EU use SR in INRAE (in France and overseas); 6 were visited in 2022 (addresses in the abstract; 3 with sheep -2 meat, 2 both meat and dairy-; and 3 with dairy goats). A detailed questionnaire was prepared. A total of 78 technologies were inventoried. From that, ~10% are invented or co-produced by INRAE, from which 7 are appreciated i.e. automate weighing device (Baléa); sorting gates (3 exits); DH20 (water consumption monitoring and weighing indoor); DAC (automatic distributor of concentrate); DAF (automatic distributor of forage); Gély test tube (individual milk yield monitoring); and Walk-over- Weighing (WoW). Five tools are used by 100% of EU i.e. EID for individual identification; Baléa for weighing; PDA (Personal Digital Assistant); temperature and humidity sensors (mandatory); and sorting gates. Interviewed staff are favourable to techs' use, but mostly for research purposes and they unanimously agreed in positive effects to alleviate workload and routine. Internet connectivity was revealed however as a serious constraint in certain areas. Four techs are recommended for farmers, recognising price may limit adoption: conveyor belt for feeding supply indoor; mixer (with tractor) for preparing total mixed rations; milk tank weighing; Combi clamp (to ease handling). The P3R EU is the best example of phenotyping EU with promising and effective techs for both research and management purposes. Information will be completed, with further upcoming visits to 100% of EUs.