Ragusa, 16 September 2021

Special Session of the 6th International online Conference on Safety, Health and Welfare in Agriculture and Agro-food Systems "Ragusa SHWA 2021"

Innovation for Smart Dairy Farming
Under the auspices of ICTAgri CowBhave project, PRIN 2017 project, AIIA II Section, CIGR, and Di3A

Programme Overview
Meeting Chair: Prof. Claudia Arcidiacono, University of Catania, Italy
Session Chair: Prof. Daniele Torreggiani, University of Bologna, Italy

15:00 – WELCOME SESSION

Prof. Agatino Russo – University of Catania
Dean of the ‘Agriculture Food and Environment’ Department

Prof. Remigio Berruto – University of Turin
President of the CIGR

Prof. Patrizia Tassinari – University of Bologna
President of the AIIA II Section

Prof. Giampaolo Schillaci – University of Catania
Ragusa SHWA Conference Convener

15.20 – LECTURES ON Innovation and sustainability for smart dairy farming

COWBHAVE final results:

The COWBHAVE system: an open-source accelerometer-based system for monitoring dairy cows’ behavioural activities, and the Virtual on-farm demonstration.

Prof. Claudia Arcidiacono – University of Catania

Using deep neural networks to detect cow behaviour from CowBhave accelerometer collar

Dr. Victor Bloch – Natural Resources Institute Finland

PRIN2017 intermediate results:

Task 1: PLF and barn microclimate. Dr. Lisette Leliveld, University of Milan

Task 2: Free access to pasture for dry cows: effects on health, behavior and production.
Dr. Lorenzo Leso, University of Florence

Task 3: PLF and Big Data for the mitigation of the effects of heat stress.
Prof. Stefano Benni, University of Bologna
Task 4: On the determination of acceleration thresholds for the automatic detection of cow behavioural activities in extensive livestock systems. Dr. Giulia Castagnolo, University of Catania

Task 5: Application of computer vision systems for herd management. Prof. Stefano Benni, University of Bologna

Task 6: PLF and sustainability in dairy cattle breeding. Dr. Daniela Lovarelli, University of Milan

The effect of microclimate conditions on ammonia emissions from an open-sided dairy barn during spring. Dr. Provvidenza R. D’Urso, University of Catania

Spatial variability of ammonia and carbon dioxide concentrations in an open-sided dairy barn. Dr. Provvidenza R. D’Urso, University of Catania

17:40 – DISCUSSION AND CONCLUSIONS