

COST Action IPLANTA CA15223

WG2 Meeting

Topical Application of RNAi: Progress and possibilities.

Rothamsted Research
Harpenden, UK

WED 26th Sept 2018

Welcome, domestic arrangements

& Chair: Huw Jones

09.00 – 09.40 **An industry perspective on sprayable RNAi.** Wendy Maddelein
Syngenta, Ghent Belgium

09.40 – 10.20 **New methods of RNAi synthesis.** Prof Tom Brown. Oxford University,
UK

10.20 – 11.00 Tea/Coffee

Chair: Dana MacGregor

11.00 – 11.25 **Greenlight's cost-effective, scalable, and cell-free dsRNA production platform.** E. Van Ekert. GreenLight Biosciences, USA

11.25 – 11.50 **Testing bacterially produced dsRNA for insect pest control.** M. Petek,
A. Coll, K. Gruden. National Institute of Biology, Slovenia

11.50 – 12.15 **The potential of virus-based RNAi products: from lab to field.** Clauvis Nji Tizi Taning, Olivier Christiaens, Luc Swevers, Guy Smagge. Ghent University, Belgium

12.15 - 12.40 **The evolution and function of piRNAs across arthropods.** S.H. Lewis.
University of Cambridge, UK

12.40 – 14.00 Lunch / posters

Chair Bruno Mezzetti

14.00 – 14.25 **Synthetic biology approach for plant protection using double-stranded RNA.** A. Niehl, M. Soininen, M.M. Poranen, M. Heinlein. Institut de Biologie Moléculaire des Plantes (IBMP-CNRS), University of Strasbourg, France

14.25 – 14.50 **Taking a molecular approach toward Discovering novel methods to control *Alopecurus myosuroides* (Black-grass).** Dana MacGregor. Rothamsted research, UK

14.50 – 15.15 **Development of whitefly resistance in cassava through RNA silencing approaches.** K.Vasudevan and H.Vanderschuren. University of Liege, Belgium

15.15 – 15.40 **Disruption of patterning in *Saccharina latissima* using RNA interference techniques.** I.Theodorou, B.Biloud, B.Charrier, Hg.Opsahl-Sorteberg. Norwegian University of Life Sciences, Norway

15.40 – 16.15 Tea/coffee

Chair suggest **Jeremy Sweet**

16.15 – 16.40 **Exploitation of the RNAi technology to solve an economic threat of perennial fruit-trees.** Michel Ravelonandro. INRA-Bordeaux, France

16.40 – 17.05 **Environmental risk assessment of RNA sprays – what can we learn from RNAi based plants?** D.C.M. Glandorf, C.P.E. van Rijn, J.W.A. Scheepmaker. Dept.of Gene technology and Biological Safety, National Institute of Public Health and the Environment, Bilthoven NL

17.05 – 16.35 **Risk assessment of food derived from RNAi-based GM plants.** Knorr E, Fishilevich E, Tenbusch L, Frey MLF, Rangasamy M, Billion A, Worden SE, Gandra P, Arora K, Lo W, Schulenberg G, Valverde-Garcia P, Vilcinskis A, Narva KE. Fraunhofer Institute for Molecular Biology and Applied Ecology, Germany

16.35 – 17.00 **Assessing the safety of dsRNA targeting *Leptinotarsa decemlineata* to the predator *Chrysoperla carnea*.** S. Arpaia, O. Christiaens, I. Urru, G. Smaghe. ENEA, Italy

17.00 – 17.30 comfort break

17.30 – 18.00 **Clay nanosheets (BioClay) for topical delivery of RNAi BioClay.** Prof Max Lu, University of Surrey, UK

Posters:

Grapevine leafroll-associated virus and its RNAi cure via nano-liposomes. N. Sadot, A. Schroeder, O. Shoseyov. University of Jerusalem, Israel

Characterization of promoter sequence of Rapid Alkalinization factor (RALF) gene in *Fragaria x ananassa* interacting with *Colletotrichum acutatum*. Negrini E, K. Ogrady, B. Mezzetti, KM. Folta, E. Baraldi. University of Bologna, Italy

Silencing of host *ParPMC* genes confers resistance to *Plum Pox Virus* (PPV) in apricot (*Prunus Armeniaca L.*). M.L. BADENES, C. ROMERO, J. BLANCA, E. ZURIAGA. Instituto Valenciano de Investigaciones Agrarias (IVIA), Spain

18.30 – 21.30 Optional evening meal / BBQ Rothamsted Conference Centre
(Charges apply)