



## **COST Action iPLANTA**

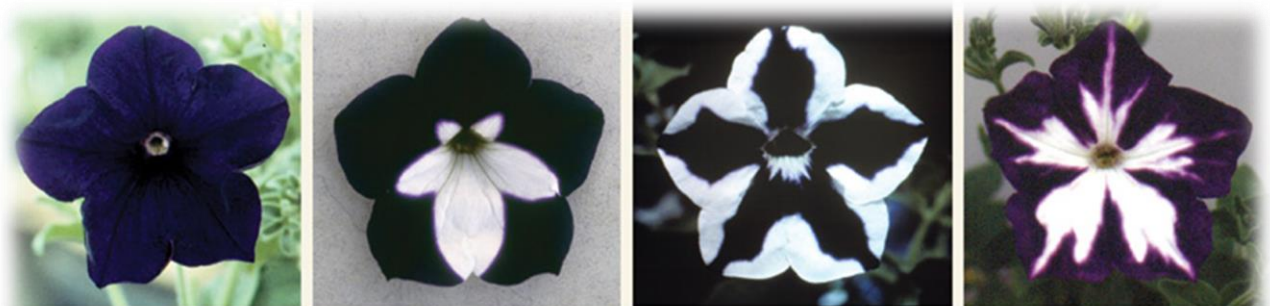
### **WG3 workshop**

**Biosafety of RNAi technology: data requirement and implications for the EU legal framework and planning RNAi plant field trials".**

**ENEA Headquarter,**

**Rome (Italy),**

**1-2 October 2019**



Wild type

RNAi



## **October 1<sup>st</sup>**

**09.00 Welcome Address:** Gianpiero Celata (ENEA Head of Department 'Energy Technologies')

**09.15 Introduction:** Salvatore Arpaia – Antje Dietz-Pfeilstetter (WG Coordinators)

Session 1: Data requirement in Europe for food/feed safety assessment and environmental risk assessment of RNAi-GM plants (each subtopic will be introduced by an invited speaker and a general discussion will follow) - Chair: Bruno Mezzetti

**09.30 Comparative assessment:** Andrea Gennaro (European Food Safety Authority, Parma, Italy)

**10.30 – 10.45 Coffee break**

**10.45 Molecular characterization:** Huw Jones (Aberystwyth University, Wales, UK)

**11.45 Toxicity and allergenicity:** Harry Kuiper (Wageningen Food Safety Research, The Netherlands)

**12.45 – 13.30 Lunch break**

**13.30 Persistence, invasiveness and agricultural practices:** Jeremy Sweet (J.T. Environmental Consultants Ltd, Cambridge, UK)

**14.30 Horizontal gene transfer:** Andrea Gennaro (European Food Safety Authority, Parma, Italy)

**15.30 Target and Non-target organisms:** Salvatore Arpaia (ENEA, Rotondella, Italy)

**16.30 Considerations on data requirement for risk assessment of products for spray induced gene silencing** Antje Dietz-Pfeilstetter (Julius Kühn-Institute, Braunschweig, Germany)

**16,45 End of day 1**

## **October 2<sup>nd</sup>**

Session 2 – Biosafety and regulatory aspects of RNAi technology in Europe – Chair A. Dietz-Pfeilstetter

**09.00 Implementation of RNAi-based pest control: Biosafety and regulatory considerations.** Olivier Christiaens, J. Sweet, K. Kostov, T. Djambazova, I. Urru, G. Smaghe, S. Arpaia (Ghent University, Ghent, Belgium - JT Environmental Consultants Ltd, Cambridge, UK - AgroBioInstitute, Sofia, Bulgaria - ENEA, Rotondella, Italy)

**09.15 Regulatory considerations for dsRNA-based products: an EU view on biosafety.** Gregory Watson, W. Moar, Kara Giddings, K. Huiiznga, R. Fernandez Canton, T. Duressa, J. Verhaert (Bayer Crop Science, Chersterfield MO, USA and Brussels, Belgium)



**09.30** Food & feed safety of “gene-silenced” crops: consequences of recent technological advances for risk assessment approaches. Harry A. Kuiper, G.A. Kleter, E. J. Kok (Wageningen Food Safety Research, The Netherlands)

**09.45** Consideration of specific issues for the environmental risk assessment of externally applied dsRNA-based pesticides. Antje Dietz-Pfeilstetter (Julius Kühn-Institute, Braunschweig, Germany)

**10.00** Sprayable RNA-based biocontrol compounds: current status and perspectives to reach the market. Clauvis Nji Tizi Taning, S.Arpaia, O. Christiaens, A. Dietz-Pfeilstetter, H. Jones, B. Mezzetti, S. Sabbadini, H.G. Sorteberg, J. Sweet, V. Ventura, G. Smaghe. (Ghent University, Ghent, Belgium - ENEA, Rotondella, Italy - Julius Kühn-Institut, Braunschweig, Germany - Aberystwyth University, Wales, UK - Università Politecnica delle Marche, Ancona, Italy - Norwegian University of Life Sciences, Norway - JT Environmental Consultants Ltd, Cambridge, UK - Università degli Studi di Milano, Milan, Italy)

**10.15** Problem formulation in the ERA of RNAi-based GM wheat with resistance to *Fusarium* pathogens. Felix Moronta-Barrios, W. Craig, A. Dietz-Pfeilstetter (ICGEB, Trieste, Italy – Julius Kuhn Institute, Braunschweig, Germany)

**10.30** siRNA specificity: mechanisms and strategies to reduce off-target effects. Gunter Meister (University of Regensburg, Germany)

**10.45** RNAi as useful tools to tackle virus infection vectored by aphids and safe substitute food for *Macrolophus* insects. Michael Ravelonandro, T. Malinowski, M. Cambra, I. Zagari, J. Kundu, P. Briard (INRA, Bordeaux, France - ISK, Skierinewice, Poland - IVIA, Valencia, Spain - FRD, Bistrita, Romania - CRI, Praha, Czech Republic).

**11.00** *Transfer to Palazzo Giustiniani, Room Sala dei Presidenti, via Giustiniani 11, 00186 Roma.*

**12.00 – 13.00** Public presentation of the iPlanta COST Action and press conference (in Italian)

**13.00 – 14.30** Lunch Break

Session 3: The need of field trials for testing biotech Plants (Hall of the Institute of Santa Maria in Aquiro, Piazza Capranica 72, Roma) - Chair: S. Arpaia

**14.30** Plenary lecture: Field trials for Risk Assessment of GM plants: Ecological and compositional studies - Why do they differ, and what is the relevance for RNAi? Joe Perry



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**15.00** Round table on regulatory and scientific requirements for field trials. Participants: Joe Perry (Former chair of the EFSA GMO Panel), Kara Giddings (Bayer U.S. - Crop Science R&D Regulatory Science), Godelieve Gheysen (Ghent University), Bruno Mezzetti (Polytechnic University of Marche Region), Huw Jones (Aberystwyth University), Michel Ravelonadro (INRA), Salvatore Arpaia (ENEA). The meeting will be moderated by Antonio Pascale, journalist, at the Hall of the Institute of Santa Maria in Aquiro, Piazza Capranica 72, Rome.

**16.30** Closure of the meeting