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**ELICITRA – INTEGRATED FRENCH NETWORK PROMOTING THE STRATEGY OF PLANT RESISTANCE
INDUCTION BY ELICITORS THROUGH RESEARCH, TRAINING AND DEVELOPMENT**

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ABSTRACT

Since the late 1990s, a new strategy of preventative plant protection emerged and was the subject of many studies in France and in the world. It consists of foliar or root applications of substances that stimulate the defense responses of plants.

The French Network Elicitra follows the 10 agro-industrial research and development priorities defined by the Ministry of Agriculture and aims to "Understand, develop and promote elicitors" complementing other plant protection methods including global system approaches.

The website www.elicitra.org provides access to all deliverables produced by the network.

Keywords: Elicitra, IPM, elicitors, stimulation of plant defence, network.

RÉSUMÉ

Depuis la fin des années 1990, une nouvelle stratégie de protection préventive des plantes a émergé et a fait l'objet de nombreuses études, en France comme dans le monde. Elle consiste en des applications foliaires ou racinaires de substances capables de stimuler les réponses de défense des plantes.

Le Réseau Mixte Technologique (RMT) Elicitra s'inscrit pleinement dans les 10 priorités agro-industrielles de recherche et développement définies par le Ministère de l'Agriculture et a pour objectifs de « Comprendre, développer et promouvoir les éliciteurs » en complément des autres méthodes de protection des plantes – et notamment des approches systémiques – au sein des filières végétales.

Le site internet www.elicitra.org permet d'avoir accès à l'ensemble des livrables produits par le réseau.

Mots-clés : Elicitra, protection intégrée, éliciteurs, stimulation de défense des plantes, réseau.

Agriculture must face challenging and apparently contradictory issues: become both competitive and sustainable. The current reduction plan of pesticide use, occurring throughout Europe, must therefore be accompanied by the development of efficient environmentally friendly methods in crop protection. Among them, the enhancement of plant defence mechanisms by elicitor treatments is one of the most promising strategies and has become a major topic of current research.

Elicitra is a French network co-animated by ARVALIS-Institut du végétal, Vegenov and INRA. Its main mission consists of promoting plant protection by induced resistance through research, training and development. This network is dedicated to large range of crops: field crops, vegetable, fruits, vine, ornamental plants and medicinal plants. It includes partners from public research, technical institutes, universities, agricultural colleges, various actors of the crop industries and competitive clusters. By bringing together various partners with different skills ranging from field to lab and from research to training, the understanding and development of this alternative approach is accelerating.

Elicitra is supported and financed by the French ministry of agriculture. It was officially launched in 2011 and will work until 2018.

The first main results of this network are:

- An active community on elicitors
- A definition of plant defence elicitor
- A data base with the main experimental results
- A list of research priority (based on an exhaustive work about plants diseases and elicitation potential progress)
- A guide for experimental advices
- A real impact on research : reorientation of research work, new research projects
- A web site : www.elicitra.org (in French)
- A scientific & technical monitoring : Elicitr'Actu (4 times a year)
- Scientific and technical meetings on elicitors (2 days meeting in 2013 with 150 participants)

During the next 4 years, Elicitra will keep working by sharing results, communicating and proposing research projects with 5 main axes:

- assessment of new elicitors,
- plant response to elicitor,
- conditions of application ,
- elicitor in IPM and agro ecology,
- unintended effects.

Elicitra is a network. In addition to scientific and technical work, exchange with administration (Ministry of Agriculture), regulation instance (ANSES), private companies are on the way and must be intensified. Elicitra has also the ambition to build relation with European research or technical active team in the field of elicitor.