

Title: Di@gnoplant: an INRA Website for Plant Protection

Chamont S., Armand J., Blancard D.

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In France, growers must manage complex production systems with only a small number of pesticides, and crops in many areas are affected by indigenous or introduced pests. Furthermore, advisory services in plant protection are at present lacking. In this context, making diagnostic and plant protection tools available for growers, engineers, teachers and students via the Internet has become a major challenge.

The main objectives of our project are twofold:

1. Create a web-based software that accrues, organizes, and disseminates knowledge and expertise in plant protection from different media sources such as text, image, and video;
2. Offer users internet applications that answer two key questions in plant protection: What disease causes which symptoms? And what control methods can be used?

The Software @Greco (knowledge accrual) has been developed. This software allowed us to develop several applications for tobacco, lettuce and cucumber diseases.

At the end of 2010, we aim to provide an INRA website that offers access for many applications in plant protection. The applications will be open access, provide an in-depth analysis of a small number of species (including non-parasitic diseases), offer interactivity with all users and be devoted to a public wider than that concerned by existing databases such as the CABI. Users will be able to identify diseases in two complementary procedures: a diagnostic key and image mosaics. More generic modules for education and training will be made available to understand procedures related to diagnosis and aetiology of plant diseases or for establishing protection strategies. These applications will be interconnected to other databases.