

TESTING THE PATHOGEN E-LEARNING AND FIELD TRAINING COURSE ON GRAPEVINE VIRUS KNOWLEDGE AND MANAGEMENT

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Abstract:


Context and purpose of the study – One of the reasons of the spread of grapevine virus diseases in vineyards around the world is the lack of knowledge by the main actors of the wine sector. To face this problem, five partners worked together to develop the PATHOGEN project, a training program aimed to improve grapevine virus knowledge and management. The partnership gathers one French technical center (IFV), one Spanish university (USC), one Italian applied research center (CREA), one Spanish foundation specialized in training and technology transfer (FEUGA) and one Italian SME specialized in the development of informatics tools and in knowledge transfer (HORTA). The objectives of PATHOGEN are: (i) to develop and maintain a high-quality work-based Vocational and Education Training program, (ii) to improve the skills of professionals of the wine sector.

Material and methods – The PATHOGEN training is the result of a project co-funded by the Erasmus+ Program of the European Union (2015-1FR1-KA202-015329). The e-learning training was developed in two levels (BASIC and ADVANCED) and four languages (English, French, Spanish and Italian); the training is completed with two practical sessions in the field, one in spring and one in autumn. The contents and platform were evaluated by the partners, an external evaluator and an advisory board of wine technicians from the 3 partner countries to ensure that the content proposed for the courses corresponded to the needs of the professionals of the sector. Once this step was validated, the pilot courses were available online, and groups of "student-testers" were selected in the 3 countries from different professional categories (technicians, winegrowers, nurserymen, students, teachers, phytosanitary official services...). Throughout the process of developing the courses, the advisors and students assessment has been essential to getting a demand-driven training.

Results - In the 3 countries, 128 people have tested the online courses. A very large majority (98%) considered the PATHOGEN program as an "interesting" or "very interesting" training course. The field sessions were crucial to finalize the training and were well appreciated by students because they allowed them to identify the symptoms of virus diseases *in vivo* (94% of the students had a "very good impression" concerning the field session). The detailed evaluations allowed us to rework the courses both in terms of content (simplification, clarity of information...) and functionality of the platform (speed of animations, quality of audio, sharpness of photos...). We have therefore improved the 8 versions of the courses (4 languages, 2 levels) taking these remarks into account and they are currently available at www.pathogen-project.eu

Keywords: grapevine, virus, e-learning, field training

1. Introduction.




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PATHOGEN WEB SITE: www.pathogen-project.eu

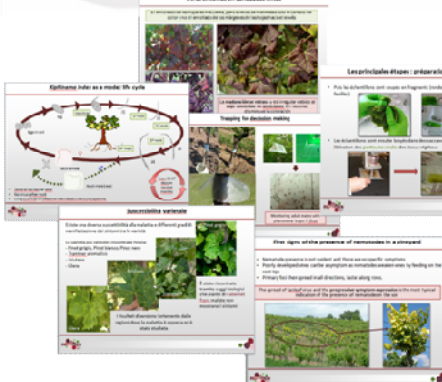
PATHOGEN COURSE e-LEARNING CONTENT


Module 1. Introduction to main and regulated viral diseases, and their agronomic and economic impact
Module 2. Transmission of grapevine viruses
Module 3. Detection methods
Module 4. Control and management of viral diseases and their vectors

Only for advanced and teaching levels:


Module 5. Emerging viral diseases
Module 6. Research perspectives on management of grapevine viruses

PATHOGEN COURSE: FOUR LANGUAGES







FREE ACCESS PATHOGEN PHOTO GALLERY




Pilot course trainees during the field sessions 2017/18



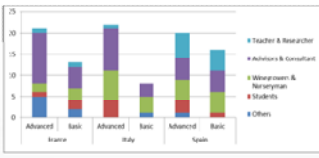
• Questions inside the chapters, to check attention and understanding
• Exams after the modules
• Two practical **field sessions** one in spring and one in autumn in France, Italy and Spain for trainees who have finished the e-Learning



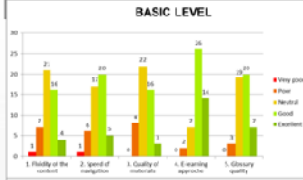
Effectiveness of the e-Learning training for advanced level



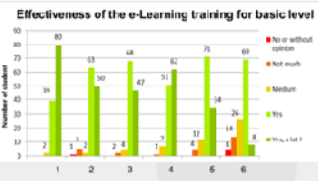
Typology of students in the pilot courses



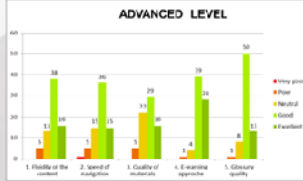
BASIC LEVEL



Effectiveness of the e-Learning training for basic level



ADVANCED LEVEL



1. Was the course interesting?
2. Did the course fulfil your expectations and skills?
3. Will you use the knowledge acquired?
4. Would you recommend it?
5. Was the duration appropriated?
6. Were the test and exams easy?

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Evaluation of the e-Learning training

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