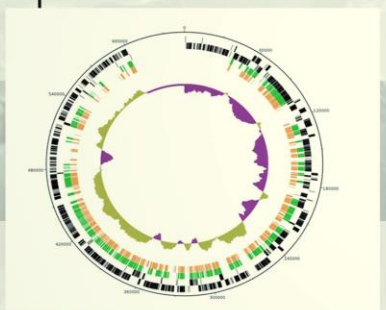
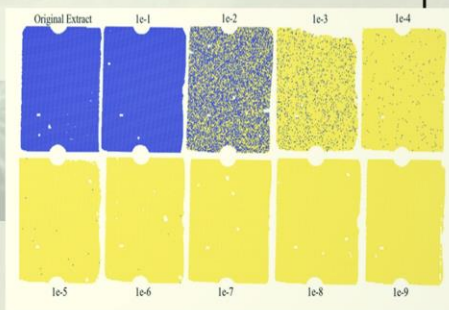
INSIGHT INTO PHYTOPLASMA-ASSOCIATED PLANT DISEASE

PLANT SUSCEPTIBILITY
AND PATHOGEN VIRULENCE

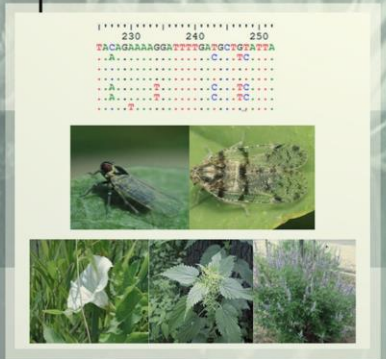
COMPARATIVE GENOMICS



NOVEL DIAGNOSTIC TOOLS



MOLECULAR EPIDEMIOLOGY



RESISTANCE INDUCERS

1. Line of research

Insights into phytoplasma-associated plant diseases.

2. ERC descriptor

LS9_4: Applied plant sciences (including crop production, plant breeding, agroecology, forestry, soil biology).

3. Job description

The research project aims to elucidate biological and molecular aspects of phytoplasma-associated diseases already epidemic (grapevine yellows) or emergent (almond witches'-broom) in Europe as starting point for developing efficient and sustainable control strategies. Experimental activities are based on a multidisciplinary approach including molecular epidemiology, comparative genomics, study on pathogen virulence and susceptibility of crop varieties, design of novel diagnostic tools, evaluation of the efficacy of resistance inducers.

4. We offer

- The winner which will choose this line of research will work in the research group of Plant Pathology
- Activities in advanced molecular biology and bioinformatics, field and laboratory experimental trials;
- Utilization of innovative tools in molecular biology (eDNA platform), collaboration with entomology and bioinformatics research groups, participation to national and international calls for research funding;
- In-depth knowledge on applying a multidisciplinary approach to study plant diseases associated with uncultivable pathogens and to develop efficient and sustainable control strategies.

5. Desired skills

- Technical skills in molecular biology and bioinformatics (i.e., utilization of the software Bioedit and MEGA).
- Deepen knowledge in plant pathology, particularly in plant diseases associated with phytoplasmas or other phloem-limited bacterial obligate pathogens.
- Preferences given to applicants with a documented research expertise in phytoplasma molecular characterization and epidemiology.
- Excellent knowledge of English language.

6. Contacts

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(ResearchGate_profile: https://www.researchgate.net/profile/Fabio_Quaglino).