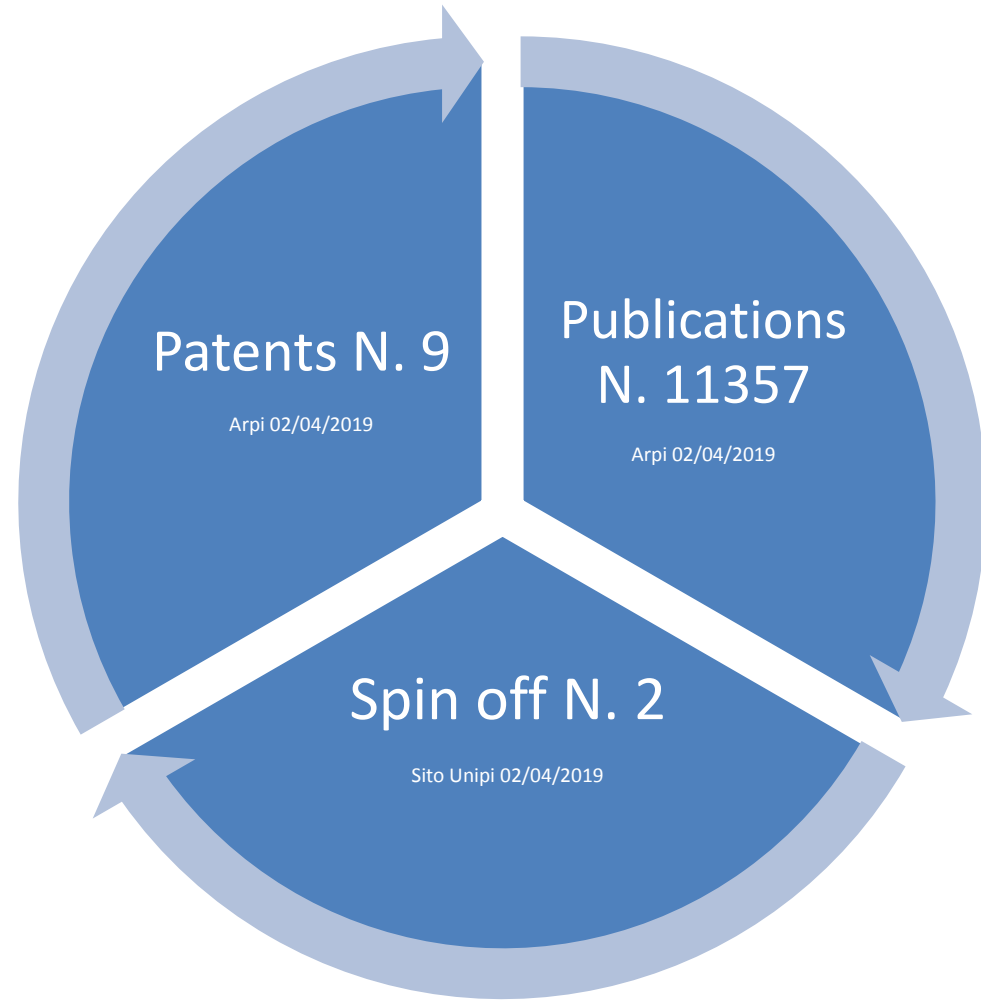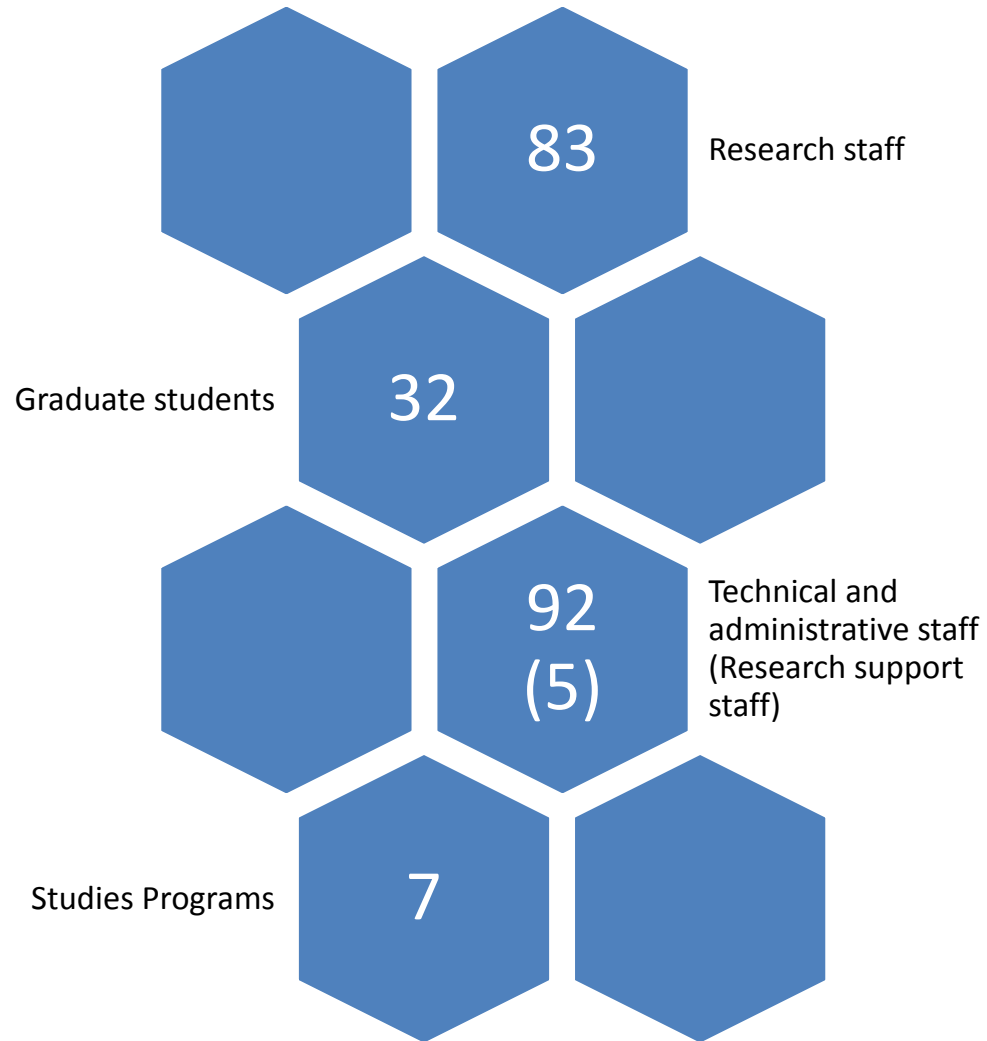# DEPARTMENT

AGRICULTURAL, FOOD AND AGRO-ENVIRONMENTAL SCIENCES

«SINCE 1840, NATURALLY GROWING IDEAS IN THE FIELD FOR A BETTER QUALITY OF LIFE»

DEPARTMENT AT A GLANCE

83 Research staff

Graduate students **32**

92 (5) Technical and administrative staff (Research support staff)

Studies Programs **7**

Patents N. 9
Arpi 02/04/2019

Publications N. 11357
Arpi 02/04/2019

Spin off N. 2
Sito Unipi 02/04/2019

Research Areas

|	
SUSTAINABILITY OF AGRI-FOOD SYSTEMS	Agri-food system can contribute to meet several sustainable development goals (SDG). Research in this field enhances sustainability of agri-food systems by producing win-win results and reducing trade-off among environmental, social and economic dimensions.
INNOVATION AND NEW TECHNOLOGY ON AGRI-FOOD SYSTEM	New advances from basic research (i.e. ecology; biochemistry, genetics and molecular biology; applied physics) represent potential drivers of change in agriculture. Developing suitable technology for agricultural systems is a viable response to new challenges.
HEALTH AND FOOD	Society is rapidly evolving very fast due to changes in demography and lifestyles. Research in these field provides alternative to ensure food and nutrition security to society as well as promotion of healthy diets to reduce social costs of foodborne diseases.
MANAGEMENT AND VALORIZATION OF ENVIRMENT AND AGRO-BIODIVERSITY	Rural areas covers the most of EU land. Provision of ecosystem services trough management and valorisation of natural capital and agro-biodiversity is one of the worldwide challenges.

RESEARCH PROJECT

DESIRA (H2020 - RIA)
Goal: Improving the capacity of society and of political bodies to respond to the challenges that digitization generates in rural areas, agriculture and forestry in the next ten years.
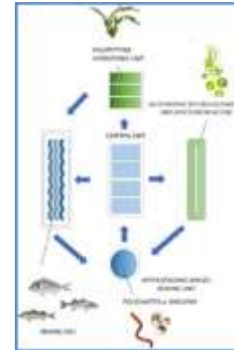
SIMTAP (PRIMA 2018)
Goal: development, in different climate and production contexts, an ecosystem-based approach for marine fish production and crop cultivation, in a circular economy perspective.

Tuscany Region - DiSAAA joint RTD project on crop protection.
Goal: development of forecasting systems and diagnostic protocols of pest and diseases in vine and ornamental plants.

BIOMON (Research contract)
Goal: biomonitoring with lichens and tobacco plants and development of environmental guidelines (IEA) in the surroundings of the ILVA steelworks in Taranto, Italy.

RESEARCH IMPACT

Policy makers (local, regional, national)
Reduced uncertainties and risks in policy making process for food, agriculture, rural development and emerging strategies (i.e. bioeconomy, Industry 4.0)

Private Agri-food actors
Stronger social corporate responsibility and improved economic, social and environmental performances of actors along the agri-food value chain

Transnational institutions (FAO, EU)
Contribution of agri-food systems to big challenges (food safety and security; transition towards bioeconomy)

NGOs and local actors
Shared solution and disruptive innovation for sustainable agriculture