

SUMMER RESEARCH 2019

• INDICATIVE TOPICS BY DEPARTMENT •

INTRODUCTION:

Research at Perrotis College allows students to further their knowledge of the Agro-food sector by exploring topics of their choice in our top-notch labs or in the field, on a group or an individual basis. Each project's specific objectives, structure and methodology will be determined in collaboration/agreement between the student and their advisers.

The list of topics is indicative; students are welcome to submit their own research topic which must then be validated & pre-approved by a Perrotis professor. Topics are organized by discipline.

INTERNATIONAL FOOD BUSINESS:

- Greek food SMEs (challenges and opportunities for development)
- Current consumer food trends -the impact on Greek agro food sector
- The potential of Greek products in US and international food markets
- Entrepreneurship and innovation in the agro food sector
- Sustainable Rural Development





APPLIED BIOLOGICAL SCIENCES: ENTOMOLOGY, PUBLIC HEALTH, BIOLOGY, ECOLOGY, AND GENETICS:

- Biophenols in Mediterranean Diet
- Mediterranean Diet and the Microbiome
- The Biological Activity of Olive Fruit, Leaves and Oil
- Microscopy and Morphological Identification of Insects
- Principles of Molecular Biology in the Lab - DNA Extraction Methods, PCR and Sequencing Analysis
- Use of Molecular Techniques in Identification of Insect Species
- Phylogenetic Analyses of Closely Related Species - Evolutionary Applications

FOOD SCIENCE & TECHNOLOGY:

- Evaluating the Physicochemical and Sensory Characteristics of table Olives
- Application of Edible and/or Antimicrobial Coatings as a means to extend the Shelf life of Fruits and Vegetables, and Muscles Foods.
- Use of Meat Marinating as a means to control Microbial Growth in Muscle Foods
- Evaluating the antioxidant potential of commercial jams, juices and marmalades

SUSTAINABLE AGRICULTURE & ENVIRONMENTAL SCIENCE:

- Aromatic & Medicinal Plants Research Program
- Cover crop systems in Organic Agriculture Research Project
- Vermicomposting Research Project
- Hydroponic systems studies in the Greenhouse
- Studies in the new research olive grove and the KRINOS OLIVE CENTER
- Precision Agriculture field studies