Newsletter 2

VITICULTURE AND OENOLOGY

SLOVENIAN CENTER OF EXCELLENCE FOR AGRICULTURAL SCIENCES (SLO-ACE)

The aim of the H2020 Teaming Project is establishment of CoE in Slovenia for achieving the vision of becoming ”The Premiere Engaged Centre of Excellence” concerned with crop science and horticulture, agroecosystems, viticulture and oenology, apiculture and sustainable meat production with ruminants and pigs adapted to local natural resources and aims at creating, developing and converting pioneering research for the advancement of the public bioeconomy nationally and internationally. The SLO-ACE (**https://sloace.kis.si/)** will contribute to the sustainable agricultural production through outstanding research, consultancy and teaching.

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AARHUS UNIVERSITET

Kmetijski inštitut Slovenije
Agricultural Institute of Slovenia

INRA SCIENCE & IMPACT

Kmetijski inštitut Slovenije
Agricultural Institute of Slovenia

The Agricultural Institute of Slovenia (**http://www.kis.si/en/**) is a public non-profit research institute, marking its 120 th anniversary in 2018. It has 187 employees, 89 of which are researchers. The Institute performs fundamental and applied research and professional tasks in agriculture, publishes the results of scientific research work as well as professional and supervision work, performs work based on authorizations and accreditations and evaluates the quality of agricultural products and commodities. The Institute is also engaged in the training of producers, education of young professionals and in consultations for various users in agricultural sector.

AREAS OF ACTIVITY

- Crop and seed science with vegetable production
- Genetics, breeding and selection
- Genetic resources and gene banks in agriculture
- Animal production (cattle production, pig production, apiculture)
- Fruit growing
- Viticulture and Oenology
- Plant and environment protection
- Supervision of fertility and quality of agricultural land
- Ecology of the agricultural space
- Soil utilization and protection
- Analyses of soil, mineral and organic fertilizers, animal feed, honey, remains of pesticides, plant protection products, wine, must and spirit drinks
- Agricultural engineering and energetics and
- Economics of agriculture

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The majority of research and professional work is done in laboratories and experimental fields and plantations

- Experimental Station for Fruit Growing - Brdo pri Lukovici
- Infrastructure Centre Jablje
- Experimental Centre for Potato Moste pri Komendi
- Selection and experimental station for bees in Senično pri Golniku
- Collection-experimental blueberries plantation Drenov grič

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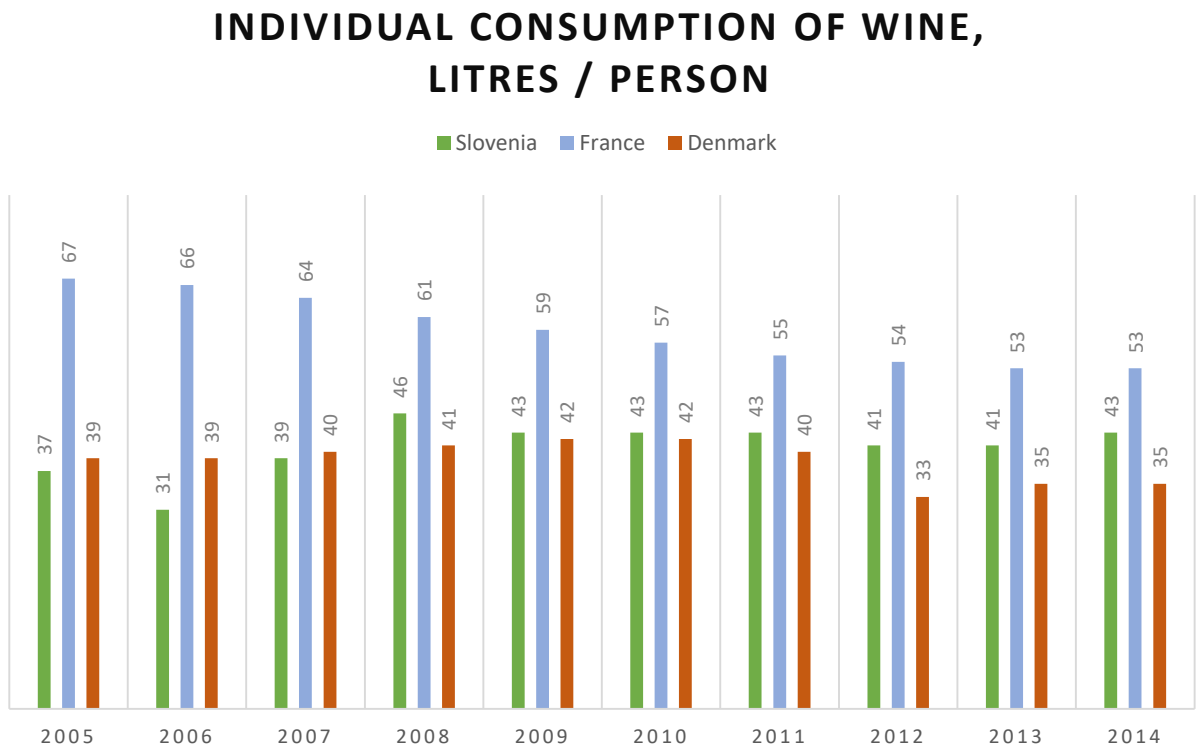
SOME BASIC FACTS ABOUT VINE-GROWING AND WINEMAKING

- Wine production represents about 10% of agricultural production in Slovenia and covers 16,500 ha of vineyards.
- The production of wine in Slovenia in the marketing year of 2016/2017 was around 0,66 mio hectolitres.
- Comparing to France, Slovenia has 54 times less areas under vineyards exclusively intended for wine production.
- The average size of holdings with areas under vineyards comprises 0,5 ha in Slovenia and 10,5 ha in France.
- The share of the vineyards that are over 30 years of age is 32% in Slovenia and 33% in France.
- OIV reports average individual consumption of wine for the period 2005-2014: 41 litres for Slovenia, 59 litres for France and 39 litres for Denmark.
- In spite of the relatively steady production of wine, the viticulture and winemaking, are facing numerous challenges related to:
    - the unfavourable age of vineyards,
    - pressures on reducing production costs,
    - changing climatic conditions,
    - digitazation in viticulture,
    - problems associated with wood diseases and
    - defining the up-to-date goals of grape vine selection and the introduction of new *Vitis vinifera* and resistant varieties.



Source: OIV

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Photos: Marijan Močivnik

The main research challenges of the CoE SLO-ACE within the **Viticulture and Oenology pillar** are focused on wine microbiology and chemistry, sensory analysis of wine, raising the technological level of grape production and new or improved oenological processes in wine cellars. The purpose is to connect research groups in Slovenia engaged in viticulture and oenology, in order to better exploit the human resources and infrastructure potential that we have. In doing so, two research teams from France will be assisted by their rich experience and excellent science in both areas:

- **L'Unité Mixte de Recherches Sciences Pour l'Œnologie (UMR SPO), Montpellier (https://www6.montpellier.inra.fr/spo_eng/Presentation),**
- **University of Bordeaux, Institut des Sciences de la Vigne et du Vin (ISVV)** (**http://www.isvv.u-bordeaux.fr/en/**).

SLOVENIAN RESEARCHERS VISIT INRA MONTPELLIER, INRA PECH ROUGE AND INRA/ISVV BORDEAUX

Between 23rd and 27th of July 2018, two researchers from KIS, Dr. Franc Čuš and Dr. Klemen Lisjak visited research facilities of INRA Montpellier, INRA Pech Rouge and INRA/ISVV Bordeaux. The aim of the visit was to discuss and determine research work for viticulture and oenology pillar within next 6 years of the SLO-ACE project. Research activities will include 4 topics (wine microbiology and chemistry, sensory analysis, and new or improved technologies in grape and wine production) with 3 PhD and 1 PostDoc student included one in each topic. Slovenian researchers were hosted by prof. Jean-Marie Sablayrolles (Montpellier) and prof. Philippe Darriet (Bordeaux) and had great opportunity to meet different research groups working on grape and wine microbiology, polyphenols, aroma compounds, sensory science, bioactive compounds, technology process and viticulture. Future cooperation within research institution will significantly and positively impact research in grape and wine sector in Slovenia. The excellence in grape and wine research will result in better competitiveness of Slovenian viticulture and recognition of Slovenian wines.

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Photo: Institut des Sciences de la Vigne et du Vin (ISVV) Bordeaux

Photos: Research equipment for studies of wine microbiology (INRA Montpellier / Pech Rouge)

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