

FIELD TRIP TO VISIT ECOLOGICAL PRACTICES IN SLOVENIAN ISTRIA WITHIN THE POSEIDONE PROJECT, 5.6.2024

The Institute of Agriculture and Forestry Nova Gorica (KGZS) organised a field trip to the Slovenian Istria as part of the project POSEIDONE initiatives to promote sustainable agriculture and sustainable ecotourism. The theme of the field trip was to visit various examples of good practices of organic farming and the marketing opportunities it offers. We visited three producers with different approaches - Freško Farm, Solari Estate and Ruzzier-Černe plant nursery, while a delicious local lunch was prepared at the Tonin Tourist Farm.

Our first stop was the **Solari estate**, an organic farm, located in the village of Reparec at an altitude of 457 m, where the young entrepreneur Vedran Stepančič is engaged in organic viticulture, winemaking and the organic production of herbs. The farm successfully grows lavender of the 'Hvar Budrovka' variety and rosemary. We visited all three locations where the lavender is grown and Mr Vedran pointed out the differences in the maturity of the plants, which occur due to different micro-climatic conditions, the different locations of the growing fields and the variations in pre-preparation of the soil. The lavender flowers are harvested by hand in July or August and the lavender is then processed as quickly as possible at the nearby Posedi - Kocjančič herbal farm in the village of Trsek. Stepančič has taken a very professional and analytical approach to the production of quality essential oil, using chemical analyses to gain insight into the chemical composition of each year's essential oil yield - for example, last year's lavender essential oil and lavender hydrolates were of high quality and had a favourable ratio of components. He stressed that the maturity of the flowers should be monitored regularly and the harvest planned precisely according to the weather forecast and the availability of the distiller. The herbs are distilled using the principle of steam distillation in stainless steel stills. The oil produced is sold as raw material for further production of natural cosmetics or for use in aromatherapy or massage. They also successfully market high-quality lavender products.

Next to the main farm building, we also visited the medieval Solari Mansion, a listed building whose confirmed historical existence dates back to the 17th century. The 350-year-old wine cellar and the fireplace, which stretches over three floors, are part of the manor house. After many years of effort, the family has succeeded in obtaining full ownership of the building, which is a prerequisite for further planned renovation works.

In addition to herbs, the farm also produces organic wine from indigenous Istrian grape varieties such as refošk, malvazija and yellow muscat, using an ancient method inherited as a family tradition.

Our next stop was at the **FREŠKO farm**, where a young farmer, Luka Belič (otherwise a successful musician), grows over 30 different types of vegetables and fruit in an intensive sustainable way on over 3600m². Luka has combined the basics of organic farming, the laws of permaculture and biodynamics. The farm's primary guiding principle is to produce vegetables in the most environmentally friendly way possible, by caring for biodiversity and natural pest control. They also rely on wildlife and farm animals to combat pests. Luka grows vegetables on worked fields as well as in a green house. To improve plant protection and increase yields netting has been installed at one of the fields. The farm does not use tractors to cultivate the fields, but works only a shallow part of the soil - loosening and aerating the soil with hand tools such as a swing hoe and a Russian pitchfork. Luka obtains good growing conditions for plants by fertilising exclusively with compost and a highly active humus fertiliser with a high organic matter and mineral content from a composting plant in the nearby village of Sveti Anton. Soil organic matter is also maintained and increased by sowing green manure plants. By improving the health of the soil, they also increase the number of worms and other beneficial insects and micro-organisms. The beds that are ready to be planted with the new crop are covered with gardening fabric in early spring and late autumn, thus reducing the amount of weeds, leaching of organic matter and humus formation. Between the beds and around the perimeters of the areas, efforts are made to plant a variety of flowering perennials to support local biodiversity and to attract pollinators. In the coming year, Luka plans to purchase hens to help with pest control and as a source of quality compost/fertiliser.

In the couple of years since they started farming, they have successfully established direct marketing of fresh vegetables to a small number of loyal local customers who receive a package of produce in neat sustainable packaging at irregular intervals (depending on the maturity of the vegetable varieties). Luka Belič has many exciting goals for the further development of his farm but admits (and acknowledges) that family help is essential for successful farming.

After visiting the two farms, it was time for lunch, which was prepared at the **Tonin Tourist Farm** in Puče. The deliciously prepared local dish Istrian *bobiči* (soup with beans, corn and smoked meat) was complemented by gratinated pancakes, filled with ricotta and caramelised figs.

We concluded our trip with a visit to the **Ruzzier-Černe plant nursery** in Sečovljah, where, until recently, Ms. Claudia and Mr. Lado had been running a successful garden centre with a wide range of plants. Due to retirement, they have decided to limit their business activities to the cultivation and sale of the medicinal *Aloe Arborescens* or “Candelabra Aloe”. We visited the two remaining greenhouses, where plants of candelabra aloes, common aloes (*Aloe Vera*) and their hybrids are grown. Aloe plants thrive well here because of the favourable climate and the abundance of sunlight. They are divided into two sections - one greenhouse contains about 150 candelabra aloes, more than 10 years old, planted in the soil, and the other greenhouse contains various potted aloe types, ready for sale. Compared to the common aloe, the candelabra aloe is not as well-known and popular, mainly because of its slower growth, greater watering requirements and smaller, less fleshy leaves containing less gel. However, the leaves of the candelabra aloe (the plant must be at least 3-5 years old before it can be used) contain a higher concentration of bioactive compounds that have beneficial effects on a wide range of health problems (including cancer) and immune system improvement. Unlike the common aloe, which is more suitable for external use (creams, ointments), whole leaves of the tree aloe are useable and are also suitable for consumption (only thorny leaf margins need to be removed). The best-known candelabra aloe remedy is the drink prepared by the Brazilian Franciscan friar Roman Zago, which contains a mixture of aloe leaves, honey and brandy. In the central grove, Ms. Claudia presented propagation by rootstock and the organic way of growing the plant. The plant thrives best outdoors for most of the year, in summer it should be in a semi-shaded position (no direct sunlight), while in winter it should be moved indoors as it cannot tolerate low temperatures below 0°C. The plant should be watered once every 10 days in summer, and only once a month in winter.

If you want to enjoy the plant, it is advisable to fertilise it with homemade chicken manure or biological fertilisers that you can prepare yourself, such as a nettle preparation. The plant virtually has no pests in this region, except for the cotton aphid. In spring (February-March), the plants develop beautiful orange-red flowers that bloom for a month.

Together with the company Fruktus, Ms Claudia successfully markets cut leaves of the aloe tree, as well as potted plants and ready-made aloe-based products - a medicinal drink and cosmetic products (cream, shampoo). Ruzzier-Černe nursery's main ambition is to raise people's awareness of the attractiveness and usefulness of the candelabra aloe and to give it a place in their home garden or patio.