



ARBORTECH

Dendrology laboratories at VET secondary school centres

At three VET secondary school centres: Biotehniški center Naklo (SI), Gospodarska škola Čakovec (HR) in Strdena Odborna škola Pruske (SK), special dendrological classrooms/laboratories have been established, where dendrological materials are collected and stored. The first step in arboriculture is recognizing different species of trees and other ornamental woody plants. We want our students and other participants in education to have the opportunity to see and touch concrete examples and parts of woody plants, such as branches, bark, seeds, fruits, cones, etc., to be able to smell conifer resins and hear the



sound of pine nuts when shaken, as well as count one-year trunk increments. These collections also include specimens of plants that are not found in our environment, but we can learn about them through the dendrological laboratory.

These are classrooms with various materials that teachers can use in their teaching process, incorporating different teaching methods to engage students and other education participants to interact with plants, recognize them, and learn about their taxonomy and characteristics. Each secondary school centre has at least 90 specimens of different tree and shrub species.



Virtual dendrology laboratory

On the special E-learning platform ArborTech, we have established a virtual dendrological laboratory, which contains descriptions of the 90 most common woody plants and shrubs found in urban environments of partner countries (SI, HR, SK). This complements the learning process with digital technology, which participants can also use in field learning situations and practical classes, as the virtual dendrological laboratory can be accessed not only on computers but also on tablets and mobile phones. Special filters have been prepared for easier

information searching, and visual materials have been developed. For each plant, the following are defined: taxonomy, native habitat, botanical description, growth requirements, uses and functions in landscaping, special uses, reproduction, types and varieties, as well as diseases and pests. Link to the website: <https://learning.arbortech-erasmus.eu/>

VET modules for »Arboriculture for Gardeners«

Based on the structured curriculum "Arboriculture for Gardeners," content has been prepared for blended learning across four professional modules: Module 1: Biology of Trees and Pedology, Module 2: Plant Identification and Selection, Module 3: Tree Pathology, Module 4: Tree Care and Workplace Safety. The content and learning materials available on the e-learning platform include: a textbook covering the four professional modules, self-assessment tools, and a virtual dendrological laboratory with descriptions of 90 plants.



Guidelines for employers for inclusion of people with mild disabilities in arboriculture

Additionally, a Guidelines for employers for inclusion of people with mild disabilities in arboriculture has been prepared. These include: ADHD, Asperger's syndrome, dyslexia, dysgraphia, dyscalculia, deaf and hard of hearing individuals, autism spectrum disorders, and Down syndrome. The contents of the Guidelines are divided into: 1) Definition of the disorder and description of the basic characteristics of individuals with special needs, and 2) Guidelines for employers in arboriculture for the inclusion of persons with special needs. Partners collaborated with school counselling services, teachers, and employers of arboricultural services in the development of the guidelines. With this result, we aim to increase the inclusion of persons with special needs in the workplace. The handbook is also helpful for teachers who educate in the field of arboriculture, especially in practical classes where students with special needs attending the classes. The handbook can assist both employers and teachers in recognizing the strengths of students/employees and adjusting tasks, content, and work accordingly to guide their development.