



## Biology and botanics

### Dear Teacher! Dear Team Leader!

When designing our game called “Biology and Botany” we aimed at taking advantage of the opportunities offered by digital technology, and creating an exciting, dynamic program that conveys knowledge outside the walls of the classroom. During this session taking place in the Botanical Garden botanical and zoological facts and information related to the wildlife of the garden are provided.

Then players get related questions, and they earn points for correct answers. The goal is to complete correctly as many puzzles as possible within 1 hour. One of the novelties of this activity is its format. Participants receive all the information and tasks on their phone through an application. After downloading the application it will display the game interface: the map of the Botanical Garden. Icons marked with an asterisk show the virtual stations that the participants need to find and activate within a specific distance in order to receive the questions they have to answer. Depending on the difficulty they can score 5, 10, or 15 points at each checkpoint, and some bonus locations await them as well. Players can use their phones to see their location and explore the destinations. They have one hour to collect points, and there's no predetermined order of checkpoints to follow. It is not necessary to visit all 46 stations to win, only the amount of points matters.

### Instructions for the ideal game experience:

Recommended group size: 2-5 people

Recommended age: 13-18 years

Game duration: 60 minutes

Field of science: botany, zoology, nature conservation

Equipment needed: smartphone (with charged battery), mobile broadband, clothing and shoes suitable for forest walks.

Before the game begins, players can download the **Action Track** app from the Google Play Store or the App Store. A QR code giving access to the game is provided on site. It is very important to set the location accuracy on your phone to “high”.

### Processing the game

After the game, the experiences and the acquired knowledge can be discussed within the framework of a class. The following quiz covering topics and questions of the session provides support for this.

This quiz uses the game interface called Kahoot where registration is required to use and create another set of questions. After registration, the set of questions can be accessed by searching for the tag below.

### **Science Inspired\_Agóra\_Biológia\_és\_botanika**

The quiz can serve as a keynote. After the game the interpretation of the questions and the analysis of the answers together will help to consolidate the acquired knowledge. The most successful player earns the title of “*Master of the Botanical Garden*”.

Of course, you can use your own quiz, too. We recommend you to take part in the game, so you can rely on your own experiences during class work.

#### Topics covered

Below you can find the list of topics covered by the adventure in the Botanical Garden: structure, classification and characteristics of pteridophytes

- gymnosperms, dioecious plants
- timeline of natural history, Bükkábrány paleontological discoveries
- leaf positions, fruit types
- plants of the Botanical Garden: common yew, silver maple, ginkgo, wild pear, ivy, giant sequoia species, plumeria, aloe vera, walnut, swamp cypress species, cedar species, common oak, phyllostachys, oneseed hawthorn
- animals of the Botanical Garden: northern white-breasted hedgehog, little owl, bats
- bird reservation, recognition of bird sounds, amphibian reservation
- the history of the Botanical Garden, Magyar Fűvészkönyv (Hungarian Herb Book)
- the Hungarian national parks, the Nagyerdő (Great Forest) of Debrecen

This project has received funding from the European Union under the Erasmus+ programme.



Erasmus+

