



PROTECTING GLOBAL BIODIVERSITY CAMPAIGN
#GAIA2030 #GenerationRestoration

GAIA 20:30 Biodiversity Sub-Goals:

1. Preserving existing and creating new forests or natural areas, e.g., school gardens, parks, green neighbourhoods, etc.;
2. Promoting sustainable management of the coastal zone;
3. Combatting pollinator and insect loss;
4. Raising awareness of and supporting actions to remove invasive alien species.

1. AUTHOR DETAILS

a.Name/s	Odete Melo
b. Country	Portugal
c.Institution/School	Escola Básica e Secundária de Canelas
d. Email	odete.melo@agrcanelas.edu.pt
e.Programmes the school is participating in (Eco-Schools/LEAF/YRE/other)	Eco-Schools/YRE
f. Would you like to receive monthly updates through our Newsletter? Yes/No	Yes
g.Submission date (dd/mm/yyyy)	11/02/2022

2. THE LESSON PLAN

A. Theme

Plants that invite pollinators to our organic garden

B. Introduction

In this lesson, students will learn more about six honey plants of the Mediterranean flora, highly attractive to pollinating insects.

Using an APP, students will identify each species and, after research, complete posters on the characteristics, benefits for the organic garden and the culinary uses of these plants.

This activity can take place in one or more classes, repeating the plants or using different sets. After the activity, the plants and posters should be displayed in the school, disseminating the compiled information. At the end of the exhibition, plants should be planted in the organic garden or in the school garden.

C. Age Group

12 to 18

D. Objectives or Learning Outcomes

Refer to the name of native honey plants.

Identify honey plants in outer space, based on visual appearance and aroma and/or using APPs.

Practice the companion planting with these six plants and the crops in the organic garden.

Being able to use these plants in healthy food and beverages.

E. Time required to deliver the lesson plan

45 mins

F. Remote preparation

Students have to:

- install a species identification APP on your mobile phone (BiodiversityForAll; iNaturalist; PlntSnap; ...)

The teacher must bring:

- tray with 4 pieces of each of the plants to be studied in class;
- 6 pots with native honey plants;
- plant labels with the species identification;
- species characterization poster to complete;
- a short quiz.

G. Planning considerations

The ideal time of the year to carry out this activity is spring because the plants should be planted in the vegetable garden or garden, after implementation in classes that are learning about sustainable agriculture or the decline of pollinating insects.

Bearing in mind that at the end of the class the groups will walk around the plants, they should be placed in different places in the room.

H. Resources Required to deliver the lesson plan

Mobile phone and Internet

Google Form

Native flora guide

I. Activity

a. Introduction

10 mins

The teacher will be by the door with a tray with pieces of the plants being studied. There will be as many pieces of the same plant, as many elements that each group must have. Each student picks up a little piece when entering the classroom.

On the board will be the title of the class: Plants that invite pollinators to our organic garden

Below are the questions to be answered in class: What are they? How are? Benefits? How to use it in cooking?

The students who removed the pieces of the same plant group together and name a representative.

b. Development

25 mins

The group representative will pick up the plant, to which the pieces they picked up belong, and the group will identify it using an APP. Once the species has been identified, the representative will get the species identification plate and the poster to complete.

This is followed by a brief survey of the plant and filling in the species poster, answering the key questions.

Key questions about plants will be posted next to the class theme: What are they? How are? Benefits? How to use it in cooking?

c. Conclusion

10 mins

Each plant is returned to its original place, together with the identification plate and the respective poster.

Students observe the work of all groups and answer a short quiz in Google Forms.

J. Evaluation and Assessment

The lesson completion activity allows you to verify that students have achieved the learning outcomes.

THE FOLLOW UP

K. Dissemination

In the next class, students must set up a small exhibition in the school lobby with the title and questions of the class and with the plants and respective posters, to disseminate the information they have compiled.

Each group will present its plant to colleagues from other classes who visit the exhibition.

L. Follow-up activity

After a few days, the exhibition will be dismantled and the plants will be planted in the organic garden or in the school garden.

M. Adaptations for students with learning difficulties

These students can be given a guide with photos of plants so they can look for one identical to the one in their group.

N. Extension for gifted students

These students can be challenged to help the other students to use the APP and/or to identify the pollinating insects attracted by each plant.

O. Background information for teachers

https://www.youtube.com/watch?v=xLn5UCM_tv8&t=15s&ab_channel=CatherineZimmerman

https://www.youtube.com/watch?v=kV0f7YIPKQk&t=37s&ab_channel=OldContinentAgency

<https://wikis.ec.europa.eu/display/EUPKH>