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REFOREST

Studying plant diversity in an agroforestry farm in the Strandzha floristic region, Bulgaria

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INTRODUCTION

Agroforestry is a land use system that integrates tree vegetation with agricultural crops or livestock. Agroforestry practices can simultaneously provide both food production and many ecosystem services from a single plot. Their effective use is also important for the protection of biodiversity in the country.

The present research is part of the activities of the REFOREST project - Agroforestry at the forefront of farming sustainability in multifunctional landscapes in Europe. One of the main goals of the project is to study the diversity of wild plant species and their potential benefits as part of a forest-farm agroforestry system in the Strandzha Mountains.



Orchis papilionacea L.



Ophrys L.

MATERIALS AND METHODS

The field research was conducted in the Bee Farm Strandzha. During the reporting period, three localities were studied on the territory of the Strandzha floristic region. A Global Positioning System was used to determine the coordinates of each location.

The study of the plant composition is consistent with the phenological calendar of the taxonomic groups. Some of the plant features were examined in situ.

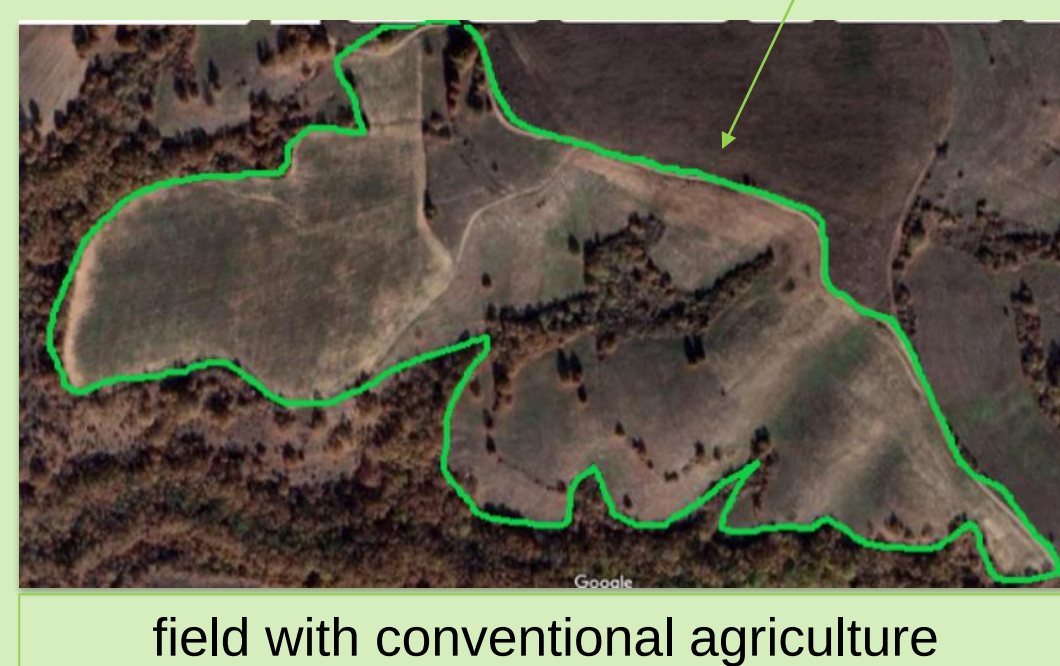
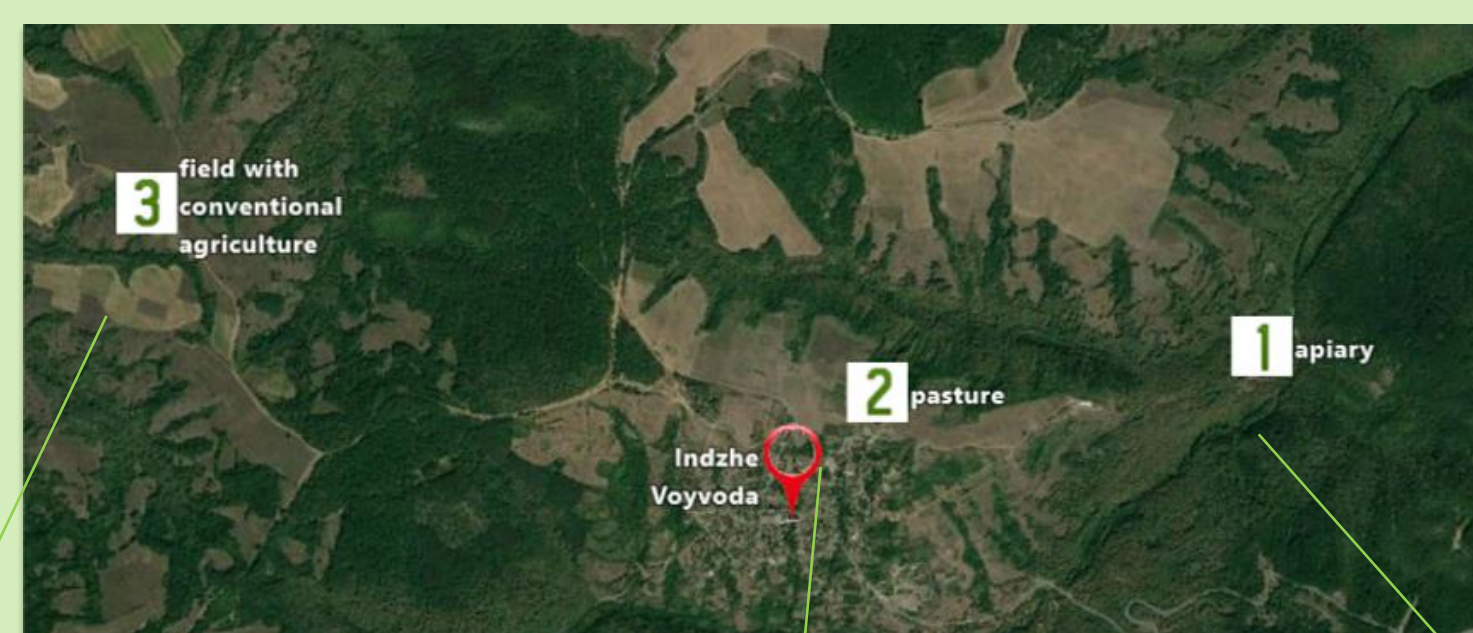
For species that are not under a special protection regime, whole plants or parts of them were herbalized and used for project's aims.



Thymus L.



Filipendula vulgaris Moench



field with conventional agriculture



pasture



apiary

RESULTS AND DISCUSSIONS

A wide variety of medicinal and honey-bearing plants has been identified from the recognized species composition. Among them widely used in folk and official medicine are: *Achillea millefolium* L., *Agrimonia eupatoria* L., *Buglossoides purpureocaerulea* L., *Carpinus betulus* L., *Centaurium erythraea* Rafn, *Cichorium intybus* L., *Cistus incanus* L., *Crataegus monogyna* Jacq., *Cornus mas* L., *Echium* L., *Fragaria vesca* L., *Galium verum* L., *Galium odoratum* Scop., *Hypericum perforatum* L., *Lamium purpureum* L., *Origanum vulgare* L., *Ophrys* L., *Prunus spinosa* L., *Plantago lanceolata* L., *Rosa canina* L., *Rubus idaeus* L., *Sorbus domestica* L., *Thymus* L., *Trifolium* L., etc.

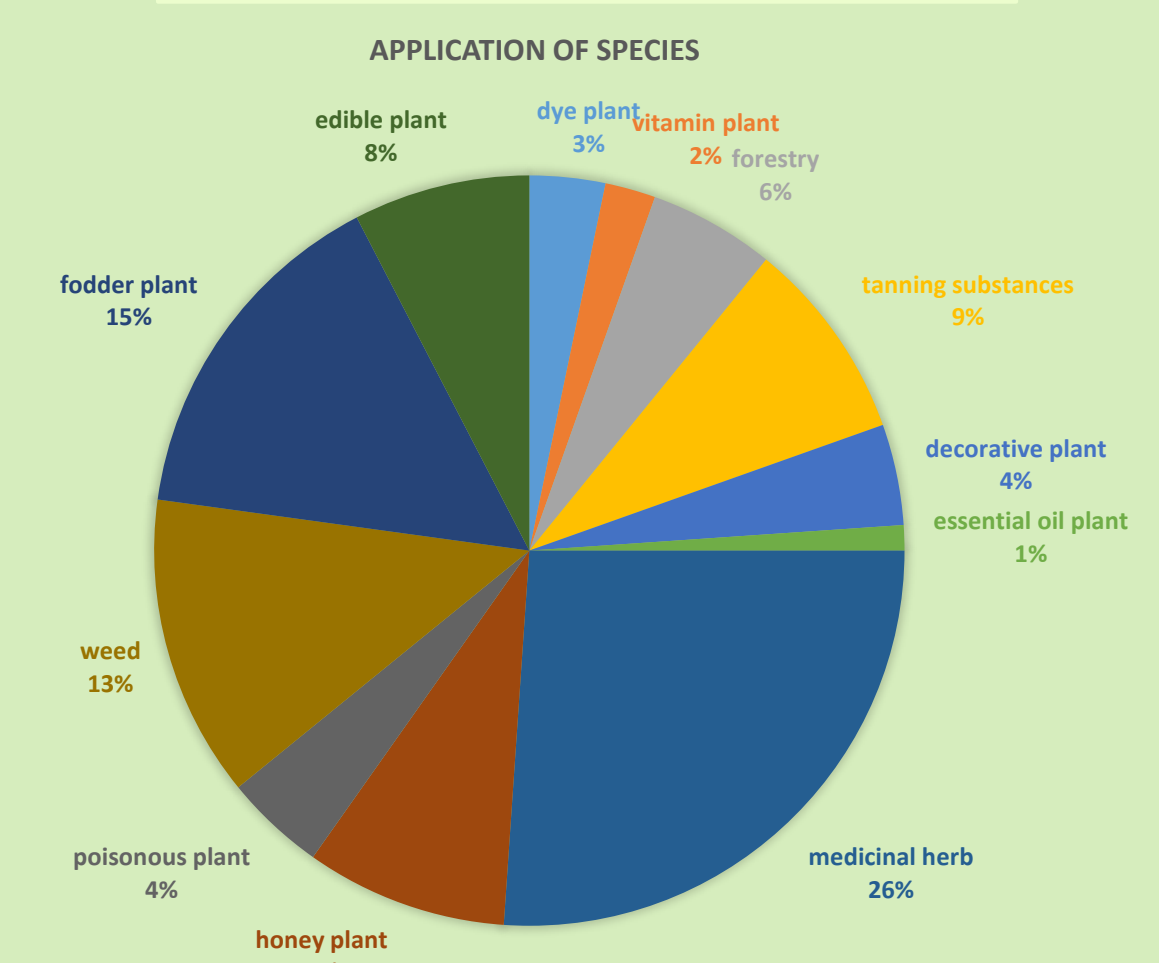
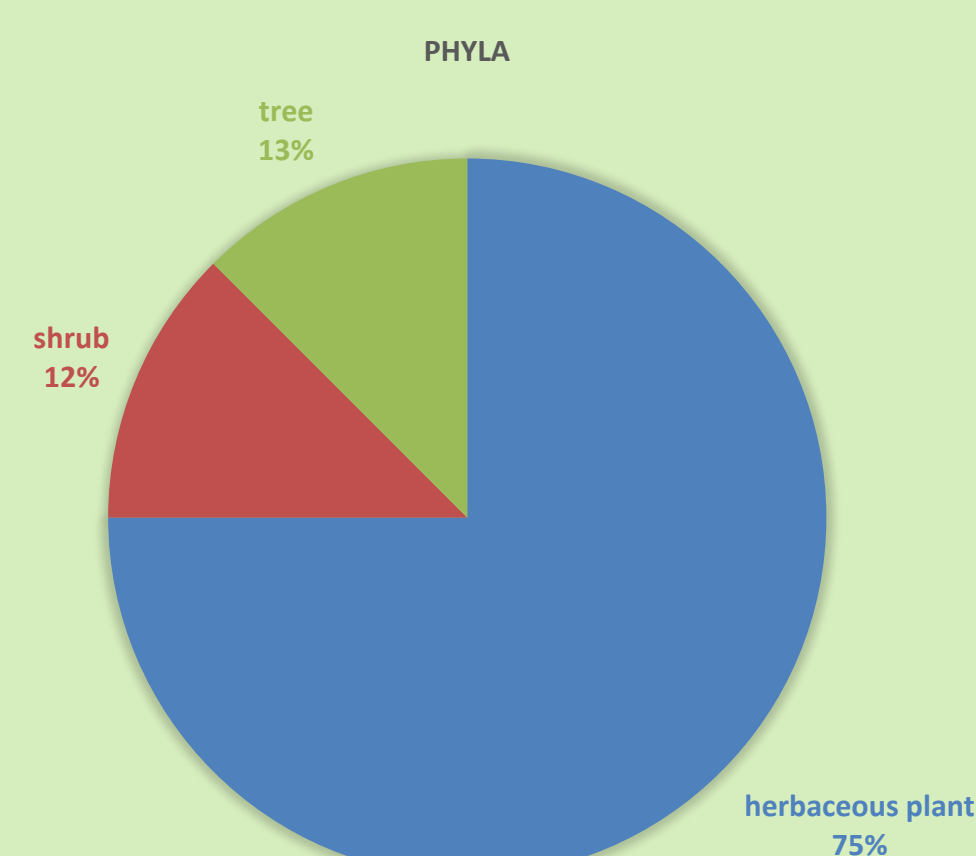
The species of the genera *Carpinus* L. and *Quercus* L. have good forestry qualities. The remaining wild species in these communities are used as sources of dyes, vitamins, essential oils, tanning substances, ornamental and food plants, timber, etc.



Carpinus orientalis Mill.



Quercus pubescens Willd., Berlin. Baumz.



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