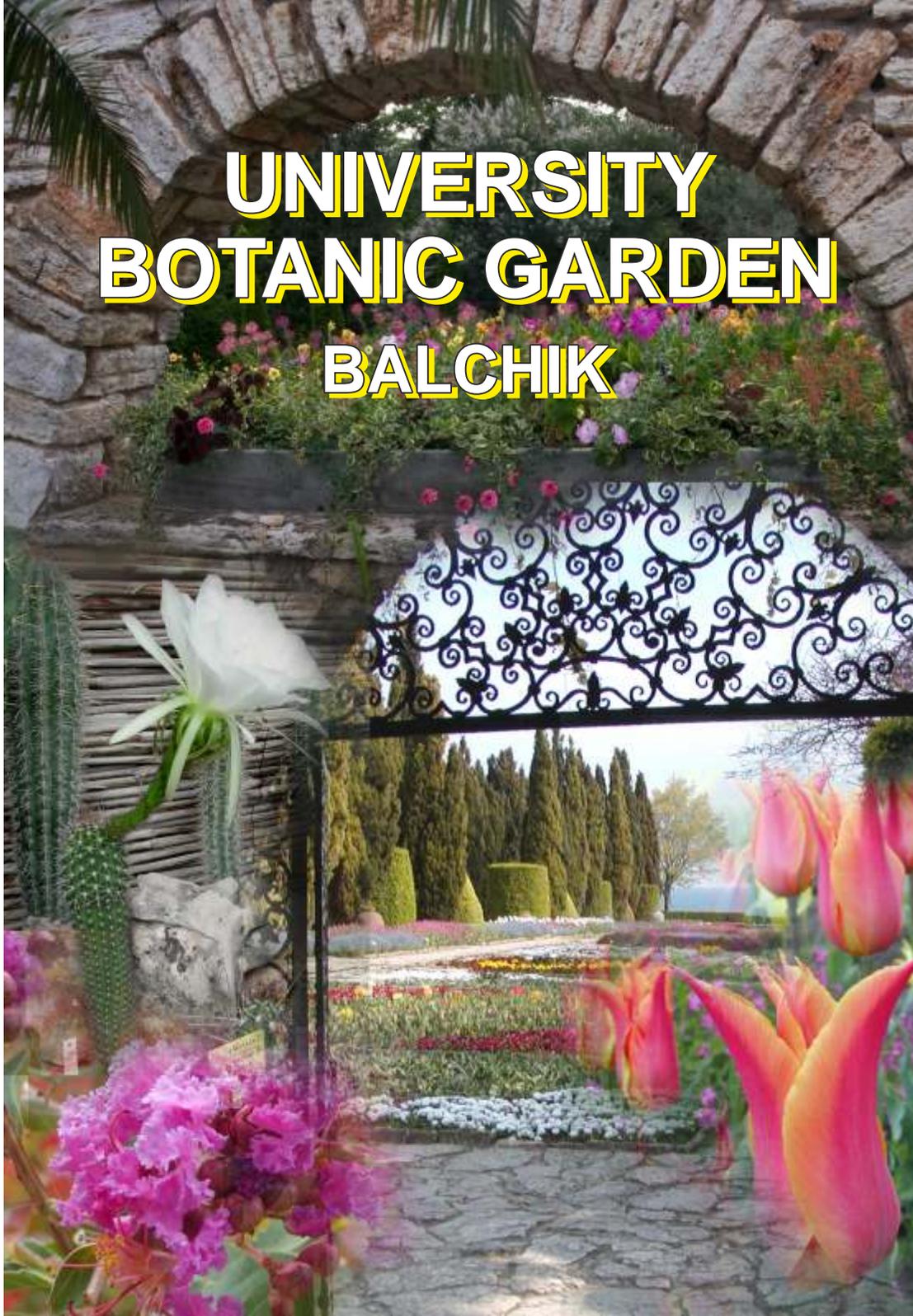


**UNIVERSITY
BOTANIC GARDEN
BALCHIK**





Welcome to University Botanic Garden of Balchik !

It is my pleasure to welcome all the friends of the vegetal kingdom to Sofia University "Saint Kliment Ohridski" Botanic Garden situated near the town of Balchik. It houses collections of vegetal species from all over the world on a surface of 6,5 ha. One of the most

attractive is the outdoor exposition of cacti and succulent plants, the second collection of this kind after the one of Monaco. The garden presents exotic plants, such as candy tree, rubber plant tree, paper tree, the rare metasequoia, ancient Ginkgo, large-flower magnolia and many others. The 3000 plant species grown in the garden belong to 35 families and over 800 genera and display an amazing diversity of varieties and shapes.

Enjoy a botanical expedition walking the paths of the Botanical garden! Allow this home of beauty and contemplation to cast its green spell on you!

Dr.Kr. Kosev, Curator

The University Botanic Garden near the town of Balchik was created in 1955 as a branch of Sofia University "Saint Kliment Ohridski" Botanic garden. Academician Daki Yordanov, a great Bulgarian botanist, was the initiator of the garden's establishment and its first curator.



Academician Daki Yordanov

The unique microclimate of this place, combining on a small surface different landscapes (a humid ravine, sunny southern terraces, sea coast) made it possible to set apart collections of plants that usually affect different areas- e .g. rockeries covered with alpine vegetation, spots of conifers, strips where successfully thrive Mediterranean, tropical and subtropical plants.

By ordinance RD-130 from 27 January 2005, Bulgarian Ministry of Environment and Water proclaimed Botanic garden - Balchik Protected area on the grounds of its uniqueness and its diversity of endemic and introduced plants grown in harmony with human activity.



Nicola Momchilov

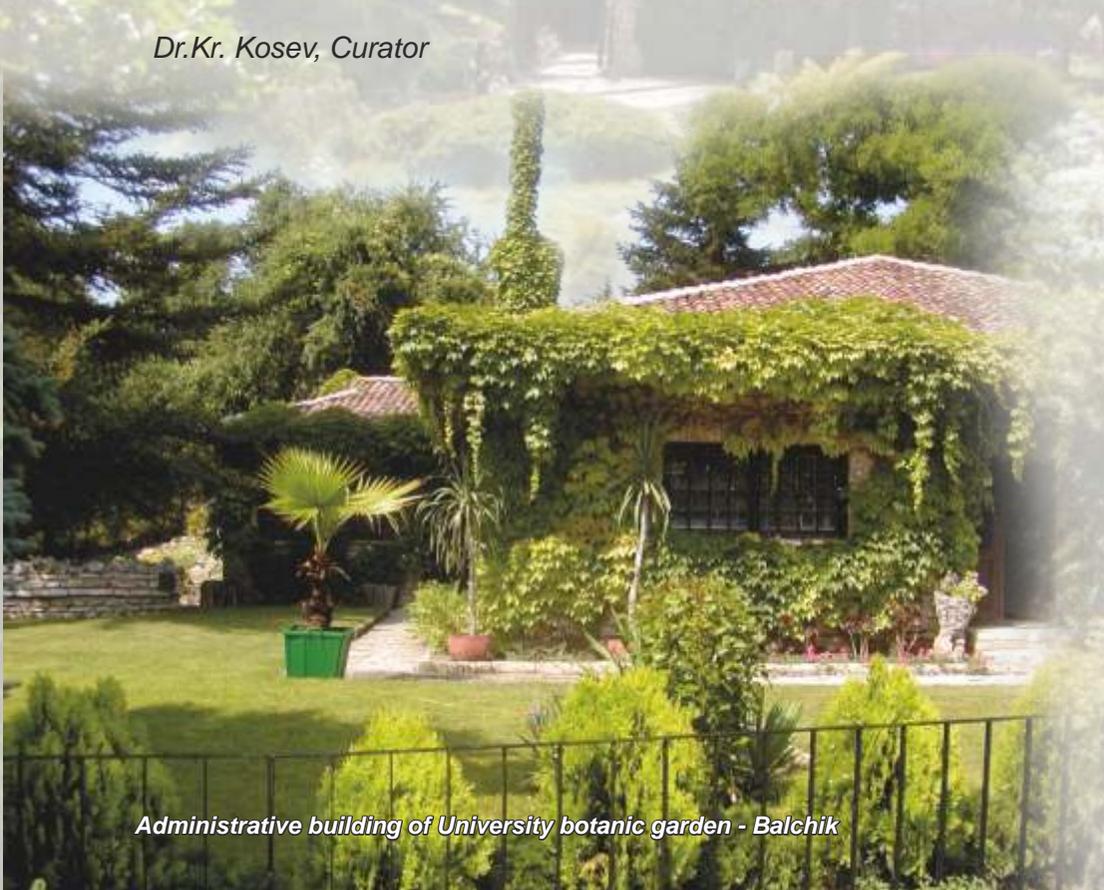
Under the sustained guidance of park builder Nicola Minchev, efficiently assisted by technical manager Nicola Momchilov the botanical garden was established on the territory of the park surrounding Romanian queen Marie's former summer residence.

Besides enrichment and maintenance of the existing collections, the garden hosts students' practices, scientific research and biodiversity observation, successful introduction of new plant species.

By edict 1878 of 1980 of the State Council, the University Botanic garden in Balchik was awarded the "Saint Cyril and Saint Methodius" 2nd class order for its contribution to the development of botanical science in our country.



A commemorative plaque of Acad. Daki Yordanov



Administrative building of University botanic garden - Balchik

In the 1990's the University Botanic garden in Balchik started a new dynamic period of its development, which embraces its membership of the World Council of Botanical Gardens, its participation in European educational projects, organization of green schools and expositions and yearly elaboration of new patterns for in-ground flower carpets presenting collections of spring and summer annual flowers.



Alley with monuments to Charles Darwin and Carl Linnaeus.



Earth day celebration by children from Balchik

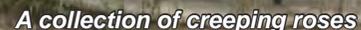
In 2005, at the occasion of its golden jubilee, the University Botanic garden added a new 6000 square meters part with facilities for disabled people. Two monuments along one of the lanes commemorate the merit of Carl Linnaeus, founder of biological taxonomy and Charles Darwin, naturalist and author of the evolutionary theory about the origin of species



Artist Shahunov's exhibition in the Garden of Gods

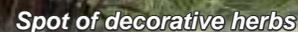


Green school activities



A collection of creeping roses

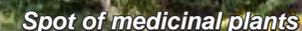
The grassy plants and shrubs grown in the medicinal part of the garden, are known for their curative properties. Jasmine, lavender, ephedra and rosemary are in blossom from early spring to late autumn. The herbs are represented by salvias, coneflowers, valeriana, marigolds, Mursalski tea (*Sidentis scardica*), thymes, poppy and many others—around 50 species and kinds, arranged in over 10 families.



Spot of decorative herbs

The arch-shaped area allows visually impaired people to recognize by touching different morphological features of the plants—ruggedness of leaves, shape and fragrance of fruit. Here they can get acquainted with jasmine, rosemary, lavender, mint, thymus, edelweiss and other plants. They can learn the species' names rendered in Braille.

This new part of the garden presents different nooks dedicated to medicinal plants, cereal plants, ferns, plants grown in sand, shade-loving plants, frost-hardy cacti and succulents. There are facilities for visually impaired people. Visitors can enjoy groups of conifers and broad-leaved trees and shrub as well as different groups of roses from over 30 kinds.



Spot of medicinal plants

The cereal plant exposition displays a rich variety of height of the stem, leaf colours and spike shapes. Pampas grass (*Cortaderia selloana*), *Miscanthus sinensis* (Chinese reed), plants from the genera *Eragrostis* (lovegrass), *Festuca* (fescue) and *Pennisetum* (fountain grass), can be seen there.



A nook for visually impaired people

The new garden's southern part houses a rockery with about 50 kinds of frost-hardy cacti and succulents which survive outdoors at temperatures reaching - 25 degrees centigrade. Amongst the representatives of the Cactaceae family one can admire *Opuntia compressa*, *Opuntia erinacea* var. *utahensis*, *Opuntia engelmani*, as well as *Yucca filamentosa*, *Yucca gloriosa*, different kinds of *Semprevivum* and *Sedum*.



Opuntia compressa

A spot of frost-hardy cacti

A two-part rockery is situated in the northern part of the garden, presenting rock and alpine plants, such as edelweiss, gentian, heather, yellow yarrow, dianthus, arabis, premium pet trees and sedums.



A spot of the rockery

Dwarfed conifers like *Thuja occidentalis* "Danica", *Thuja orientalis* "Tiny Tim" and *Picea glauca* "Conica" complete the harmony of the garden.

Aubretia hybrida

Flower carpets composed by ground-planted spring and summer annual flowers are highly admired by the visitors.



Tulipa x liliflora "Ballerina"

Viola cornuta
"Jonny Jumps"

In spring, from March to May, over 80 tulip varieties of all kinds are shown in this ground cover, as well as a great number of hyacinths, daffodils, anemones, aquilegia, over 30 kinds of violets and other spring flowers.

Narcissus hybrida
My story

Spring ground cover

In summer, from June to October, the flowerbeds shine with multi-color patterns of interlaced design, formed from tagetis, Celosia, Madagascar Periwinkle (Catharanthus), salvias, dahlia, alyssum, and many other summer flowers. Decorative leafy plants, such as iresine (chicken gizzard), alternanthera, coleuses and plectranthus are used to form the edges. The patterns include over 80 kinds of annual plants.



A design of Salvia splendens



Summer ground planted flower carpet

Tagetes erecta F1 "Gold"



Celosia argentea f. cristata

The small ponds with different in colour water lilies and aquatic plants, the square with the white fountain and the alley with the water effect, form interesting spots in the recent part of the garden.



Nymphaea alba



Bolivicereus samaipatanus

The new greenhouse

A new greenhouse covering 800 square metres was built in 2009 in order to preserve and to shelter a yearlong exhibition, presenting the oldest specimens of large-sized cacti, as well as the collection of dwarfed cacti and other succulents. Over 1500 species arranged by native areas are shown in the greenhouse, of which more than one hundred CITES-listed.

As a national tourist site of unique beauty, the University Botanic garden in Balchik attracts countless Bulgarian and foreign visitors. At the very main entrance the tourists find themselves impressed by an exotic collection of palm trees including 33 species. Some of the trees are over 30 years old. The *Trachycarpus fortunei* and the Dwarf palmetto (*Sabal minor*) grow in the open, while the date palms, the *Washingtonia* and the *Chamarops humilis* spend the winters in greenhouses.

Maple trees grow along the main lane which descends in direction of the sea to the first stone bridge. On the left, next to a group of decorative bushes-spindle trees and barberries-grows a 400-year-old poplar (*Populus Alba*). This natural landmark is a representative of the local (autochtone) vegetation.

Along the left riverbank on your right grows the bamboo (*Sasa japonica*), the only tree among the cereal plants which grows exceptionally fast. Holly, Mahonia, butcher's broom and other broad-leaved evergreen bushes grow there, shaded by the silver poplars.

A twin-peak rockery crossed by three gullies has been built on the right riverbank. You'll be delighted by the great variety of rock plants, herbs, asters, sedums and tulips, including the

Vitosha tulip, enlisted in Bulgaria's Red book. Broad-leaved bushes, such as black currants, horizontal cotoneaster, Chinese bitter orange (*Poncirus trifoliata*), honeysuckles and fragile ephedra, endemic to this area, can be seen there.

Conifers are represented by junipers - *Juniperus media* "Old gold", *Juniperus Sabina*, *Juniperus Sabina valerigata*, - and by thujas -*Thuja occidentalis* "Reingold", *Thuja occidentalis* "Golden Globe", *Thuja orientalis* "Aurea nana", as well as the fir- tree (*Abies concolor*) and the dwarfed spruce *Picea glauca* "Conica". North from the rockery there is a conifer grove of Aleppo pines (*Pinus halepensis*), Spanish fir (*Abies pinsapo*), Atlas cedar (*Cedrus atlantica*), oriental and occidental thujas and cypress.



Populus alba



The Rockery

Having climbed southward the nearby slope, we reach one of the most curious trees in the garden- the metasequoia (*Metasequoia glyptostroboides*). The genus was described thanks to fossils in 1941. A living plant was found 5 years later in Asia, during a botanical expedition. Nowadays sequoia is being preserved in the Chinese provinces Sichuan and Hubei. The specimen in the Botanical garden in Balchik is among the most ancient ones grown outside their natural habitat.

On the same terrace grow several representatives of *Cedrus atlantica*, *Pinus nigra*, *Ponderosa* pine, column-shaped thuja and other conifers.



Metasequoia glyptostroboides



The Spring garden

Next to them, a long tunnel formed by box trees leads to the Spring garden, flecked with the vivid colours of campanulas, columbines, anemones, irises, in perfect harmony with the beauty of rare dendritic peony and the tender fragrance of jasmine and lilac.

Attracted by the inspiring sight of the sea, let's follow the many grades of the maze and reach the Quiet nest residence where we'll have the surprise to find the dioecious rubber tree, the white crape myrtle, the countless creeping branches of the trumpet flower, the fragrant racemes of wisteria.

Terraces and breast walls invaded by climbing virgin's bowers and honeysuckles, lead to the second stone bridge, offering a magnificent view of the fall.

Opposite the pond surrounded by cone-shaped box trees grow interesting angiosperms-*thujopsis*, ephedra and giant thuja. Some outstanding representatives of the gymnosperms are *Sterculia platanifolia*, *Photinia serrulata*, *Quercus ilex*-the Holly oak.



View of the English landscape garden

In the English landscape garden, white-flowered water lily vies in beauty with the large fragrant flowers of the evergreen magnolia (*Magnolia grandiflora*). The specimen is among the oldest ones on the Balkan Peninsula. The magnolia family embraces the most primitive representatives of angiosperms, which is proved by their pine cone-like shaped fruit. Large-flowered magnolia is usually in blossom in the end of June.



Magnolia grandiflora

Our next stop is the rich and full of colours Rosarium, an enchanting place where over 50 kinds of roses are grown. They belong to different groups- tea roses cultivars, polyanthus, creeping and long-stemmed roses.

Roses are believed to come from Persia, well known in the past for the impressive amounts of roses grown there. The country was given the name Gyulistan- Rose Valley. From the eighth to the twelfth century the interest in roses grew considerably. Arabian caliphs brought roses to Sicily and Spain for their palaces' gardens. The oil-yielding Damask rose in particular was widespread in the Balkan Peninsula. In our country it initially spread in the area of Kazanlak and was thus named after this town-Rose of Kazanlak (*R.damascene* var. *trigintipetala*). Oleaginous roses growing and attar extraction were largely developed and Bulgaria became one of its leading producers in Europe. Large areas in southern France and Morocco are well known for their rose oil produce, however Bulgarian rose oil is of a superior quality. To obtain 1 gram of rose oil we need 1400 rose flowers, or about 3 tons of petals for one kilo.



Rosa tea hybrida "Sissi"

The attractive sorts presented in the rosarium illustrate the success of modern selection, e.g. purple-blue "Sissi" and "Jorianda", "Henry Matisse"- a cream-striped red rose, "Meli Melo"- a yellow-striped red rose.

The Rockery on the first terrace

At the far east end of the garden, exotic trees cast their shadow over the alley. At its very beginning grow paulownia, pagoda tree (*Sophora japonica*), persimmon and, next to them - maclura and majestic dioecious Ginkgo. During his expedition to Japan, German botanist Kaempfer was the first to discover *Ginkgo biloba*. It was compared to a "living fossil for 150 million years" by Darwin, the author of the evolutionary theory. As a dioecious tree, Ginkgo is usually planted in groups of male and female specimens.



Ginkgo biloba

The tree has been grown for centuries in Buddhist temples as a sacred plant and this has allowed it to save its primitive features to present.

Next to Ginkgo grows *Hovenia dulcis* (the raisin tree). The fleshy rachis of its infructescence is sweet, rum fragrant and edible. In China it is the main ingredient of a medicine against dipsomania. A *Pyracantha coccinea* swerves on the terrace below the chapel. Some interesting introduced shrub species thrive in this part of the garden- *Securinega suffruticosa*, *Rhus typhina* (stag's horn sumac), *Zyzyphus jojoba* (red date) and some others. *Albizia julibrissin*, endemic to the subtropical areas in Central Asia, is unique for its fleecy flowers and the particular way it folds its leaves along the mid-rib when the temperature changes.



Pancratium maritimum

Sand lily (*Pancratium maritimum*) blooms in the end of July. Although the sand is burning hot, the plant is fresh and green, ready to dress up in beautiful white flowers. Its freshness is due to the bulb, deep planted in the sand.

Having seen the tulip-tree, the paradise apple, the fig trees and the loquat (Japanese medlar tree), we arrive at a striped stem tree (*Brossounetia papyrifera*) known also as the paper tree, native to eastern Asia- Japan and China. Its bark has been used for over two millennia to produce the world finest paper.



Liriodendron tulipifera

Walking along the upper terrace, we reach the breast walls covered with creeping roses. Stone steps lined by Judas trees lead to the Garden of Gods.

Cercis siliquastrum, alias the Judas tree, occurs in Asia Minor, the Mediterranean region and the Balkan peninsula. The deep pink flowers are produced in clusters on older growth, including the trunk. This phenomenon is called cauliflory.



*Judas tree
Cercis siliquastrum*

The Garden of Gods is divided into two parts by a murmuring brook framed by two lines of imposing pyramidal cypress (*Cypressus sempervivens*).

The Garden of Gods is divided into two parts by a murmuring brook framed by two lines of imposing pyramidal cypress (*Cypressus sempervivens*).

Each year its western part is covered with a flower carpet of ground planted spring and summer annual flowers.



Spring ground cover

Spring ground cover is formed by 80 kinds of tulips, daffodils and hyacinths, daisies and violets of different size and colour and forget-me-nots, arranged in various patterns, stripes and edges.

After the spring plants run to seed, they are replaced by summer flowers - salvia, tagetes, celosia, catharanthus, edged by decorative leafy plants, such as cineraria, coleus, plectranthus, alternanthera



Summer ground cover



*Opuntia
Macdougalliana Rose*

All cacti are succulents, but not all succulents are cacti - South America houses the world largest number of succulent plants and none of them is a cactus.



JLarge-sized cacti

Milkweeds prove that plants from quite different systematical groups show identical morphological features when thriving in similar climate conditions. The highest "cactus" in the garden is in fact a milkweed (*Euphorbia abyssinica*); its core is full of a milky juice (latex). Most cacti in the collection represent the *Opuntia* genus, first introduced in Europe by Christopher Columbus. *Opuntia tomentosa*, *Opuntia ficus-indica*, *Opuntia macroacantha* and *Cylindropuntia* are particularly large. The century-plants representatives (*Agavaceae*) are of special interest. The American century-plant (*Agave Americana*) is used as a raw material for tekila production. Century-plants bloom once just before they die.

In 2003 the University botanic garden was proclaimed a Rescue centre under CITES.

UNIVERSITY BOTANIC GARDEN BALCHIK

Sofia University
"Saint Kliment Ohridski"



- ▶ Main entrance
- Garden with facilities for disabled people
- B** The Carnation Garden
- C** Rockery
- D** The Garden of Gods
- E** Cacti and Succulents Exhibition
- F** Spring Garden
- G** The Garden of the Princess ("The Weeping Garden")
- H** The garden with the Waterfall
- I** The Garden of the Prince (English Landscape Garden)
- J** The Magnolia Garden
- K** The Rosarium
- L** The Garden of Gethsemane

- Dendrological collection
- Introduced species
- Floral compositions
- Lawns
- Natural Ecosystems
- Farmyard
- Water spots
- Alleys net
- Breast walls
- Buildings
- UBC-Balchik Headquarters

- 1** Raisin Tree
- 2** Arizona Cypress
- 3** Dioecious Ginkgo
- 4** Large flowered Magnolia
- 5** Sacred Oak
- 6** Rubber Tree
- 7** Paper- tree *Brossounetia papyrifera*
- 8** Lagerstroemia
- 9** Meta-sequoia
- 10** Water Lilies
- 11** Sand Lilies
- 12** Secular tree (Poplar)

9600 Balchik , P.o.box 56
 Telephone ++359 579 72338
 Fax ++359 579 76197
 Mobile ++359 878429925
 e-mail: ubg_balchik@abv.bg