J. Plant Develop. 16 (2009): 91–96

THE SUBSECTION FOR SIGHTLESS PEOPLE IN "ANASTASIE FĂTU" BOTANIC GARDEN, "ALEXANDRU IOAN CUZA" UNIVERSITY OF IASI

STĂNESCU IRINA-ELENA¹, POPA MIHAELA¹, TĂNASE CĂTĂLIN²

Abstract:

The Subsection for Sightless People belongs to the Ornamental Section and started in the autumn of 1991. In 2008 we tried to reorganize this subsection, first of all by enriching the collection of species exposed to the visitors, introducing a new model of labels and using especial props for the plants. Many species from *Lamiaceae* family have been chosen, characterized by a high level of essential oils, volatile phenolic compounds, alkaloids, balsams, tannins, liberating strong-scented odors, which facilitate their recognition by the sightless persons. At the same time, a lot of *Asteraceae* species are displayed, while in the autumn the sightless people enjoy the numerous chrysanthemum varieties from the Botanic Garden's collection. All of the specimens bear labels with information in Latin and Braille System.

Key words: Braille system, sightless people

Introduction

This year all sightless people celebrated the bicentenary of the birth of Louis Braille (4 January 1809 – 6 January 1852) which is the inventor of the writing system that bears his name, Braille System. Combined with new technologies, today Braille offers better access to written information than ever before.

At the beginning, most people thought that blind persons could never learn to read, because the only way to read was to use the eyes. Louis Braille got blind from the age of three. He desperately wanted to read. He understood that most of the thoughts, feelings, and ideas were almost impossible to express because of his disability. That is why he intended to find out a key to learn, write, express... in a single word 'communicate', for him and for other blind persons.

As a blind person, Louis learned to adapt and learned to lead an otherwise normal life. He went to school with all his friends. He was both intelligent and creative. He did not want to let his disability slow him down. When he grew older, he went to Paris, to improve his education. He heard of a school that was especially for blind students. He went there to find himself a solid education. There, Louis read all fourteen books for the blind in the school library.

These books had large letters that were raised up off the page. The books were large and bulky. He could feel each letter, but it took him a very long time to read a sentence. It took a few seconds to understand each word and by the time he reached the end of a sentence, he almost forgot what the beginning of the sentence was about.

¹ "Anastasie Fătu" Botanic Garden, "Alexandru Ioan Cuza" University of Iasi, <u>irinastanescu2005@yahoo.com</u>, <u>popamihaela_gbi@yahoo.com</u>

² Faculty of Biology, "Alexandru Ioan Cuza" University of Iasi, tanase@uaic.ro

Louis believed there must be a better way for a blind person to read, quickly and easily as a sighted person. He spent a lot of time working on an alphabet made up entirely of only six dots (two columns consisting of three dots each one). The position of the different dots would represent the different letters of the alphabet. This way, Braille system born.

Discussions

The Subsection for Sightless People belongs to the Ornamental Section [MITITIUC & TONIUC, 2006.; MITITIUC & al., 2003]. It started in the autumn of 1991 and it is situated on the left part of the administrative pavilion, on the alley which guides us to the Exhibition Greenhouse.

The Botanic Garden of Iasi initiated this subsection thinking that the beauty of the plants can be understood using the tactile and olfactory senses which substitute the visual one in the partially or totally sightless people.

In 2008 we started to reorganize this subsection, first of all by enriching the collection of species exposed to the visitors. Most of the species belong to *Lamiaceae* family, which consists of more than 400 species all over the world; all species can be easily recognized by their squared stems in cross section, oppositely and decussated leaves and their typical flowers with petals fused into an upper lip and a lower lip. All body superficies or only the leaves are covered by trichomes or glands [NICOLAE & OPREA, 2007] which secrete scented etheric oils, phenolic volatile compounds, alkaloids, balsams, tannins that can be easily recognized by the sightless people. The species belonging to the *Lamiaceae* family are as follows: *Stachys officinalis* L., *Hyssopus officinalis* L., *Lavandula angustifolia* Mill., *Melissa officinalis* L., *Ocimum basilicum* L., *Rosmarinus officinalis* (L.), *Salvia sclarea* L., *Salvia officinalis* L., *Origanum vulgare* L., *Nepeta mussinii* Spreng. ex Henckel, *Nepeta cataria* var. *citriodora* L., *Monarda citriodora* Cerv. ex Lag., *Monarda dydima* L., *Stachys byzantina* C. Koch, *Agastache mexicana* (H. B. K.) Lint. et Epling, *Glechoma hederacea* L. 'Variegata'.

At the same time, a lot of species belonging to the Asteraceae family are displayed: Achillea millefolium L., Anthemis tinctoria L., Artemisia absinthium L., Artemisia dracunculus L., Calendula officinalis L., Tanacetum vulgare L., Tanacetum parthenium (L.) Schultz, Chrysanthemum balsamita L., Tagetes patula L., Echinacea purpurea (L.) Mnch., Santolina chamaecyparissus L., Santolina virens Mill. Other species exposed to the visitors: Pelargonium zonale (Hart.) (Geraniaceae family), Tropaeolum majus L. (Tropaeolaceae family), Celosia cristata L. (Amaranthaceae family), Cerastium tomentosum L. (Caryophyllaceae family), Verbena hybrida Voss. 'Red' (Verbenaceae family).

All these species have been carefully chosen for the visitors, so that they could recognize them by feeling the shape of the plant (some plants are tall, others are short, some plants form small bushes), plant texture (some plants bear rigid hairs, while others have smooth hairs which cover especially the leaves) and fragrance (most of the species belong to *Lamiaceae* family).

All species cultivated on the Sightless People Alley are situated on woody props, so that they come closely to the hand of the visitors. All species bear labels (written in Latin and Braille System) where the visitors can find information about the plants (scientific and the common name, the usage and the chorology of the plants presented in this subsection).

First of all, we had labels made on transparency films; now we had labels engraved in plexiglass; all information can be easily understood by the visitors due to the typical book shape of the label.

Other species which are to be exposed on the alley: Agastache foeniculum Pursh (Kuntze), Agastache rugosa Kuntze, Ocimum lamiifolium Hochst., Ocimum basilicum L. var. piperitum, Ocimum basilicum L. 'Citriodorum', Ocimum tenuiflorum L., Ocimum basilicum L. 'Opal', Ocimum basilicum L. 'Green Pepper', Ocimum basilicum L. 'Anis Blanc', Ocimum kilimandscharicum Guerke, Salvia lavandulifolia Vahl., Salvia tiliifolia Vahl., as well as Iberis odorata L.

Chrysanthemum, known as 'autumn flower', is a plant of honor, symbolizing handsomeness and tenderness.

When our Botanic Garden prepares for the autumn season, the Alley for the Sightless People presents to the visitors numerous varieties of *Chrysanthemum indicum* L., as follows: *Chrysanthemum indicum* L. *'Elda White'*, *Chrysanthemum indicum* L. *'Elda Yellow'*, *Chrysanthemum indicum* L. *'Elda Orange'*, *Chrysanthemum indicum* L. *'Tivisa Lilac'*, *Chrysanthemum indicum* L. *'Rubin'*, *Chrysanthemum indicum* L. *'Conaco Yellow'*, *Chrysanthemum indicum* L. *'Conaco Bronze'*, *Chrysanthemum indicum* L. *'Natalie'*, *Chrysanthemum indicum* L. *'Camina Red'*, *Chrysanthemum indicum* L. *'Modena Pink'*, which are traditional varieties in our garden, delighting by their shape, colures and discreet fragrance.

Each exemplar bears plexiglass label with information in Latin and Braille System.

References

- MITITIUC MIHAI & TONIUC ANGELA. 2006. Grădina Botanică "Anastasie Fătu" Iași. File de istorie. Iași: Edit. Univ. "Alexandru Ioan Cuza", 160 pp.
 MITITIUC M., VIDRAȘCU PROFIRA, PRICOP CRISTINA, TEODORESCU GEORGETA, RUGINĂ
- MITITIUC M., VIDRAȘCU PROFIRA, PRICOP CRISTINA, TEODORESCU GEORGETA, RUGINĂ RODICA, OPREA AD., TĂNĂSESCU VIOLETA, FINCIUC CARMEN, ADUMITRESEI LIDIA, TĂBĂCARU C., SÂRBU I., TONIUC ANGELA & IFRIM CAMELIA. 2003. Grădina Botanică "Anastasie Fătu" Iași. Ghid. Ed. a IV-a, Iași: Edit. Univ. "Alexandru Ioan Cuza", 89 pp.
- 3. NICOLAE ȘT. & OPREA A. 2007. Botanică sistematică. Iași: Edit. Univ. "Alexandru Ioan Cuza", 391-394.
- $4. \qquad http://www.amba france-uk.org/Louis-Braille-inventor-of-the.html\\$
- 5. http://publicliterature.org/2008/02/08/the-story-of-louis-braille/

Explanation of plates:

- Plate I: Fig. 1: Panel of the Subsection
 - Fig. 2: Sightless People Alley
 - Fig. 3: Tropaeolum majus L.
 - Fig. 4: Tagetes patula L.
 - Fig. 5: Salvia officinalis L. 'Icterina'
 - Fig. 6: Santolina chamaecyparissus L.
- Plate II: Fig. 7: Nepeta mussinii Spreng. ex Henckel
 - Fig. 8: Calendula officinalis L.
 - Fig. 9: Plexiglas label
 - Fig. 10: Salvia officinalis L. 'Purpurea'
 - Fig. 11: Cerastium tomentosum L.
 - Fig. 12: Verbena hybrida Voss. 'Red'
- Plate III: Fig. 13: Sightless People Alley with chrysanthemum
 - Fig. 14: Chrysanthemum indicum L. 'Elda Orange'
 - Fig. 15: Chrysanthemum indicum L. 'Camina Red'
 - Fig. 16: Chrysanthemum indicum L. 'Modena Pink'
 - Fig. 17: Chrysanthemum indicum L. 'Tivisa Lilac'
 - Fig. 18: Chrysanthemum indicum L. 'Elda White'

PLATE I



rig. 1





PLATE II







PLATE III



Fig. 13 Fig. 14



