

## The History of Plant Cultivation in the Botanic Garden of the Jagiellonian University in Cracow (Poland) in the Years 1783-1800

### *Introduction*

The Botanic Garden of the Jagiellonian University in Cracow, founded in 1783, is the oldest botanical garden in Poland. It was organized as one of the auxiliary institutions of the Department of the Chemistry and Natural History, transformed into the Department of Botany in 1847 and into the Institute of Botany in 1913. During its longlasting history it was one of the most important scientific and didactic centers of development of Polish botany, with an ample collection of plants imported from many geographical regions.

Because of the abundance of documents preserved in the Archives of the Jagiellonian University, the Jagiellonian Library and the Botanical Museum in Cracow, it has been possible to reconstruct the history of plant cultivation in the years of activity of the Cracow Botanic Garden (from 1783 to present) (Piekietko, 1983).

The area chosen for the Botanic Garden was the former palace garden situated in the residential district of the city called Wesola. The palace, built about 1600 as a Renaissance «villa suburbana», was remodelled in the years 1787-1791 into the Astronomical Observatory of the Cracow University. The garden probably existed since ca. 1600 as a typical palace garden with an ample collection of ornamental plants. This garden occupied a small area of about 2.4 hectares, and was arranged as a Baroque park of French type, with a geometrical pattern of plants grown in rectangular beds. It opened onto a vast panorama of the Vistula valley, and in its southern part had a rectangular pond, adapted from the old riverbed, which has been preserved till now.

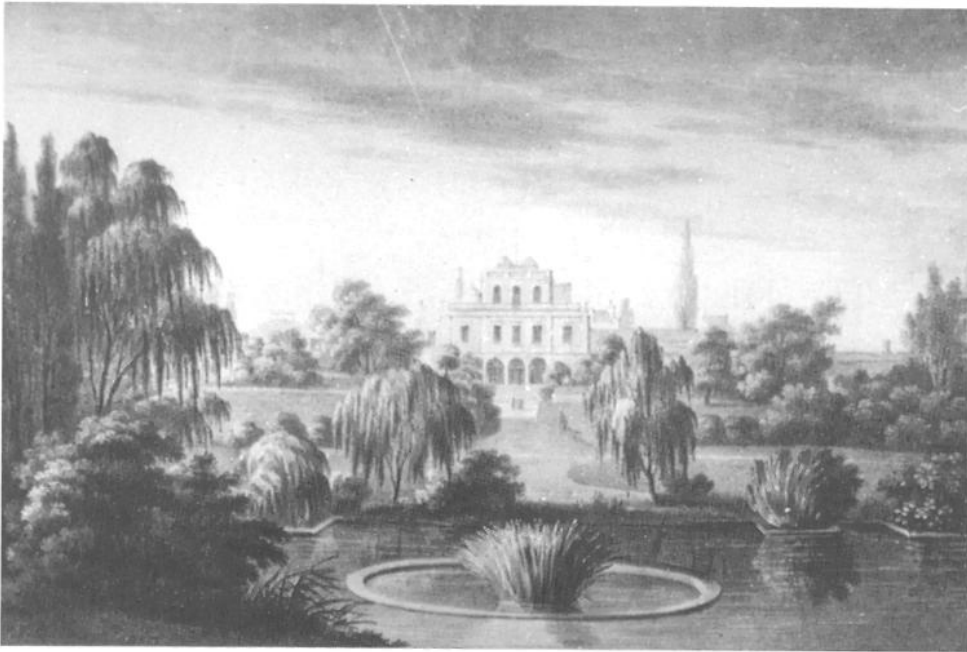


Fig. 1. View of the Cracow Botanic Garden from the pond side. Drawn by Jan Feliks Piwarski, 1834 (From the Jagiellonian Library collection).

In spite of the transformation of this palace garden into the Botanic Garden in 1783 its old arrangement has partially survived till today (in the taxonomical part of the present garden). Nowadays the Botanic Garden is the only Baroque garden of the French type preserved in Cracow.

#### *The history of plant collection in the years 1783-1800*

The oldest, hitherto known plan of the Botanical Garden is contained in the general plan of Cracow from 1785. The garden was designed by an Austrian gardener, Franz Keiser, under the direction of Polish director Jan Jaskiewicz. The pattern of the garden was of geometrical type with a central axis which still exists. The area of the garden was divided into two terraces separated by a low escarpment. The plants were grown in rectangular beds (so called «cabinets») surrounded by hedges of cut hornbeam (*Carpinus betulus*). In the cabinets the following groups of plants were grown: bulbous plants, annuals, biennials, perennials, grasses, shrubs, shrublets and medicinal plants.

Another 18th century plan of the garden, made by the architect Feliks Radwanski, dates from 1797. It shows the state of the garden and the design of the new area (joined together some years later, in 1819-1825). The plan of the oldest greenhouses, built in 1786 1787, is also preserved.

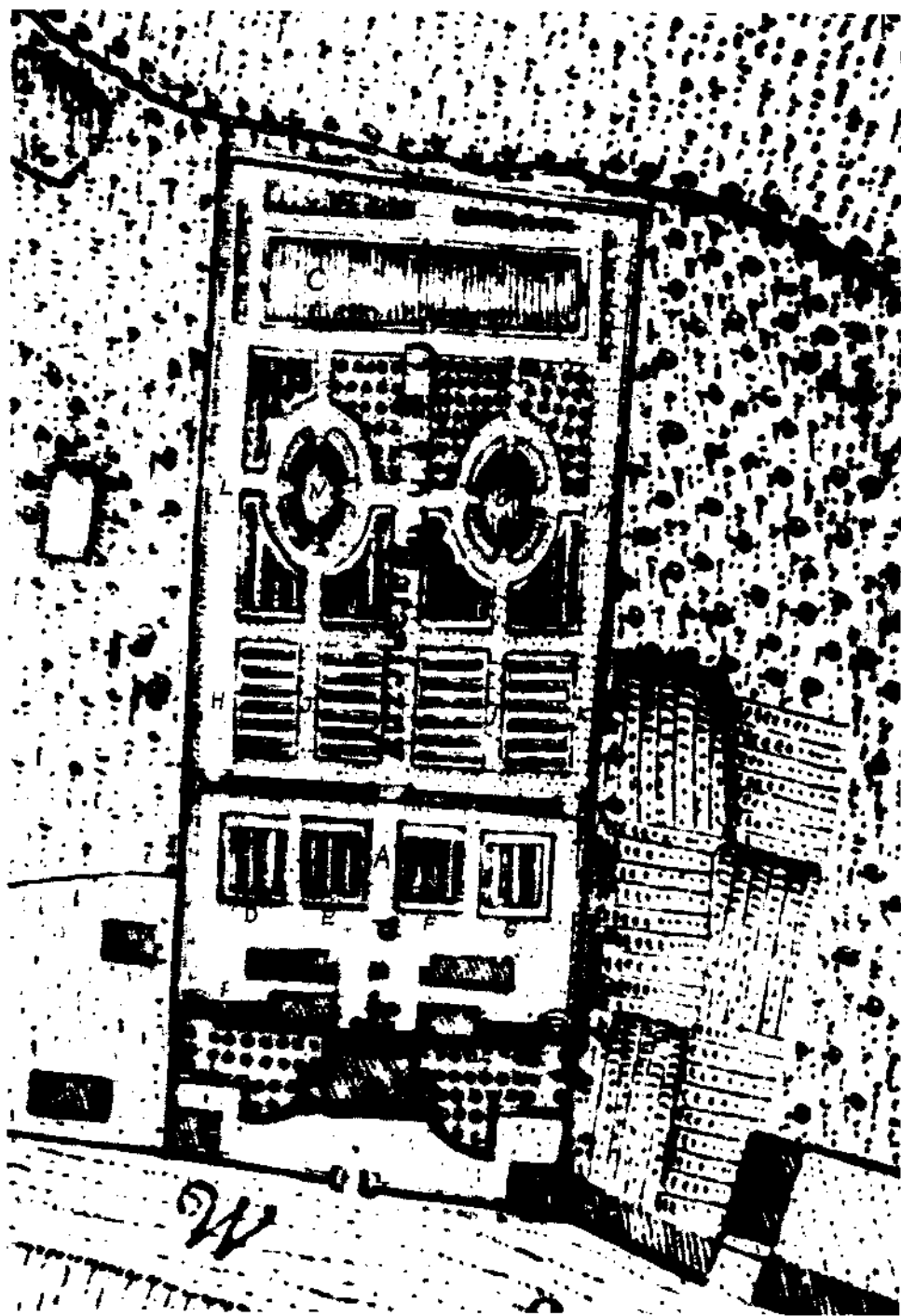


Fig. 2. Plan of the Cracow Botanic Garden from 1785: a palace, b greenhouses c side pavillions, d main alley, A, B, C, D, E, F, G, H, I, J flowerbeds, K, L small ponds, M pond (From the Jagiellonian Library Collection).

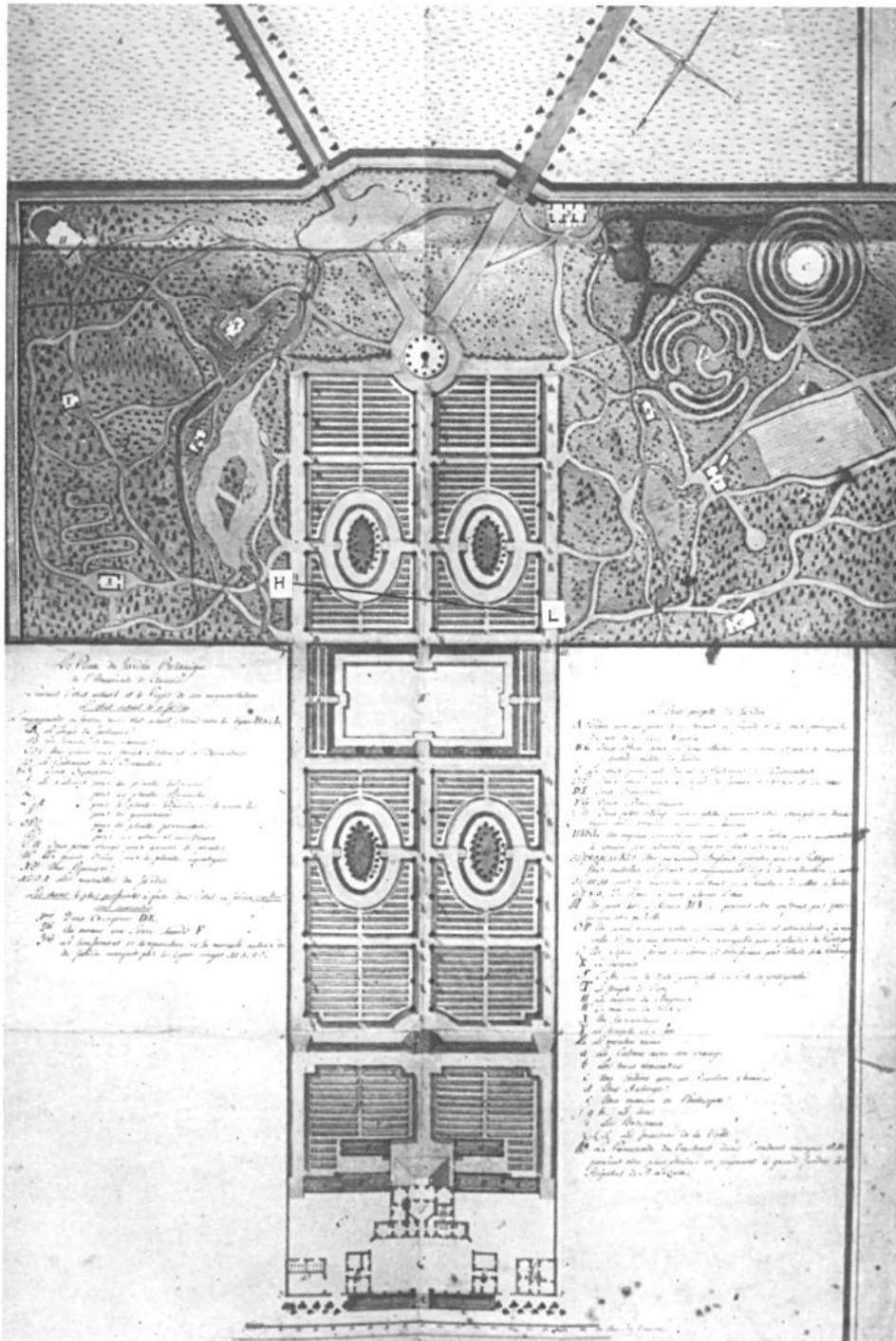


Fig. 3. Plan of the Cracow Botanic Garden from 1797 drawn by Feliks Radwanski. Contemporary state (to the HL line) and the design for management of the new area (From the collection of the Archives of the Jagiellonian University).



Fig. 4. Two specimens of *Cornus mas*, planted towards the end of the 18th century (From the collection of Botanical Museum in Cracow).

The plant collection flourished at the end of the 18th century. At this time the garden possessed over three thousand plant specimens imported from the gardens of Paris, St. Petersburg and Vienna, and also collected from natural Polish localities. The contacts of Polish director Franciszek Scheidt with director of the Vienna Botanic Garden Michel Joseph Jacquin played an important role and Cracow received many rare plants from Vienna.

The oldest preserved catalogue of plants dating from the first years of the 19th century, shows the state of the plant collection at the end of the 18th century. It contains 1192 species and varieties of plants, of which more than 150 (13 %) were greenhouse ones.

The collection of plants cultivated in the greenhouses was typical of European gardens of this time. It mainly included useful tropical plants, such as *Ananas* sp., *Carica papaya*, *Citrus medica*, *Gossypium arboreum*, *Musa x paradisiaca*, *Oryza sativa* and *Saccharum officinarum*. It is known from the documents preserved in the Archives for the Jagiellonian University that some of these species bloomed and fructified, e.g. in 1791 the specimen of *Musa x paradisiaca* fructified for the first time and its fruits were sent as a gift to the Polish King Stanislaw August Poniatowski. The bills from the

sale of the fruits of plants proved that the specimens of *Ananas sp.*, *Citrus medica*, *Cucumis sp.* and *Pirus cydonia* fruited in Botanic Garden at the end of the 18th century.

Many species of other tropical plants, originating from different regions, e.g. *Abrus praecatorius* (Africa), *Cardiospermum halicacabum* (tropical America), *Cycas revoluta* (China), *Lobelia comosa* (south Africa) were also cultivated in the greenhouses.

A large number of Mediterranean useful or ornamental plants were cultivated in the greenhousees, such as *Adiantum capillusveneris*, *Arbutus unedo*, *Capparis spinosa*, *Cercis siliquastrum*, *Ficus carica*, *Myrtus communis*, *Nerium oleander*, and *Laurus nobilis*.

The medicinal plants formed an important part of the outdoor collection. They were used for teaching the students of medicine. This group of plants included both Central European and Mediterranean species, e.g. *Achillea millefolium*, *Anchusa officinalis*, *Atropa belladonna*, *Artemisia abrotanum*, *Calendula officinalis* and *Digitalis purpurea*.

In the flowerbeds many ornamental species of the genera *Acanthus*, *Achillea*, *Anemone*, *Anthemis*, *Aster*, *Bromus*, *Campanula*, *Hieracium*, *Ipomaea* and *Rosa*, etc., were cultivated.

It is very difficult to say which of the 18th century plants have survived till today. Nowadays the collection of plants includes many species known to have been cultivated at the end of 18th century. Some of them, especially trees and shrubs, seem to be very old but there are no detailed plans or documentation testifying such suppositions. Most probably only two specimens of *Cornus mas*, a specimen of *Koelreuteria paniculata* and one of *Cycas revoluta* in the greenhouses have survived till today.

Alicja ZEMANEK  
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#### REFERENCES

- PIEKIELKO, A., 1983, *Historia Ogródu Botanicznego Uniwersytetu Jagiellońskiego Krakowie (The History of the Jagiellonian University Botanical Garden in Cracow)*, Krakow, PWN, 114 p.