

Hidden treasures: Florence's botanical collection

Italy's first centralized museum of plants was one of the early flowerings of the unification movement.

Alison Abbott reports on an important scientific legacy.

During the nineteenth-century movement for the unification of Italy known as the *risorgimento*, governors of the fractious independent states on the Italian peninsula were wary of gatherings of intellectuals — they tended to talk unification politics, and to be patriots. It is a measure of the open-mindedness of the liberal Leopold II, Grand Duke of Tuscany, that in 1841 he allowed the Third Congress of Italian Scientists to be held in his capital, Florence, despite that incendiary label 'Italian'.

Better still, Leopold rushed the completion of a special room in which to host the congress: the Tribune of Galileo in the city's Imperial and Royal Museum of Physics and Natural History, which Leopold's ancestor had created a century earlier in a medieval palace on the outskirts of town. The Tribune, with its marble busts, frescos and mosaics, doubled as a shrine to Galileo, whom risorgimentists had adopted as a symbol of united Italy.

It was at the Third Congress of Italian Scientists that the idea of a centralized herbarium in the Italian-speaking countries was proposed by Filippo Parlatore. This lively Sicilian had recently abandoned a medical career in favour of botany, his true passion, and he left his native Palermo in 1840 to tour the botanic centres of Europe. From Paris, he sent the congress a missive deploring the state of the small collections he had visited in Italy and arguing for the foundation of a single herbarium to develop the new disciplines of taxonomy and phytogeography, the geographical distribution of plant species.

His proposal struck a chord with the congress attendees. More importantly, it won the approval of the Grand Duke, who would be paying for it. Leopold subsequently invited Parlatore to be the first director of the *Herbarium Centrale Italicum* in the Imperial and Royal Museum. Today, the herbarium is among the most scientifically valuable historical plant collections.

Parlatore took office in 1842, and Italy's most important botanists began to send him their collections of dried plants pressed between sheets of paper. His acquisitions were crowned in 1850 by a bequest from his friend, the famous English botanist Philip Barker Webb. Webb left his entire collection of around 500,000 specimens as well as his extensive library to the herbarium. He had collected widely in Europe, Morocco and Brazil, and wrote one of the most important texts on the natural history of the Canary Islands.

Parlatore organized exotic collecting expeditions for the herbarium; these continued into the twentieth century, with many specimens being added from Italy's East African colonies.



Intricate wax models (above and left) of plants at Florence's Museum of Natural History look just like the real thing.

Botanists from all over Europe regularly visited the resulting collection.

Parlatore also curated an extraordinary collection of wax plants and fruits, including some models of plant anatomy and pathology. The collection showed visitors all parts of a plant, at all times of year. The wax models were made by the same artists who produced the more widely known human anatomy ones.

These artists worked under the guidance of expert botanists, such as Giovanni Battista Amici (1786–1863), a polymath whose interest in optics led him from telescopes and astronomy to microscopes and plant anatomy. The pots in which the wax plants stand, and the ceramic shells displaying their wax seeds, were made at the Doccia porcelain factory near Florence, supplier of fine figurines and tableware to the rich and royal.

Visitors can now see more than 500 of these bright and beautiful wax specimens, which at first glance are indistinguishable from the real thing. They can also enjoy a collection of around 60 botanical portraits — oil paintings that were commissioned by Florence's powerful Medici family, in part to show off their valuable

exotic plants all year round.

After Italy's unification in 1861, botanical research came to be dominated by the microscopy techniques that Amici helped to develop. Taxonomy fell out of fashion and the herbarium and its curious wax models were mostly relegated to teaching tools. The collection was moved to the nascent university in the centre of town, where it is still housed. To this day, many of the holdings have not yet been examined by scholars. In the 1930s, Galileo's instruments and other memorabilia — including his mummified finger — were transferred from the Tribune of Galileo to Florence's new Institute and Museum of the History of Science. But the Tribune itself and the entire Imperial and Royal Museum of Physics and Natural History more than reward a visit. Through their political ideals, the risorgimentists facilitated a wonderful scientific legacy. ■

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The botany section of the Museum of Natural History can be visited by appointment at 4 Via la Pira, 50121 Florence, Italy.