

FEATURE

Agronomic Institute of Campinas – One of the Most Renowned Research Centers in Brazil

The Agronomic Institute of Campinas (IAC) was founded on June 27, 1887 by the Emperor of Brazil D. Pedro II as the Imperial Agronomical Station of Campinas. It is the oldest institution dedicated to agronomy in Latin America. In 1892, it was transferred to the São Paulo State government, and today, it is part of the São Paulo's Agency for Agribusiness Technology, linked to the São Paulo State Secretariat of Agriculture and Supplies.



The Agronomic Institute of Campinas headquarters is located in the city of Campinas, SP, Brazil

Currently, the IAC staff includes the Director-General Dr. Marcos Guimarães de Andrade Landell, 161 scientific researchers, and 319 support employees. The IAC physical area of 1,279 hectares houses the Headquarters, the Campinas Experimental Center, and 12 Research Centers distributed among the cities of Campinas, Cordeirópolis, Jundiaí, Ribeirão Preto, and Votuporanga, which are occupied by laboratories, vegetation houses (structures built with various materials, such as wood, concrete, iron, aluminum, etc., covered with transparent materials that allow passage of sunlight for growth and development of plants), and other infrastructure suitable for the work carried out.

IAC's mission is to generate and transfer science and technology for the agricultural business, aiming to optimize plant production systems and contributing to socioeconomic development with environmental quality. Its objectives are: to develop research actions in tune with the demands of the agricultural sector; predict and propose demands; develop and transfer products and processes; produce technical and scientific bibliographic material; guide the formulation of public policies; form scientific and critical competencies; contribute to food security; propose innovative products and processes.

The Agronomic Institute is a source of pride for Campinas, which for over 100 years has been home to one of the most renowned centers of intelligence and research in the field of agriculture, a rich scientific heritage to contribute to the quality of life and wealth generation from the countryside.

Research developed by the IAC

The Agronomic Institute conducts research on production systems of more than 100 types of plants. Due to this research, the State of São Paulo is able to cultivate plants from the most diverse regions and climates in the world with economic success.



Agronomic Institute conducts research on the production systems of more than 100 types of plants.

The questions about what, when, and where to plant, how to improve the soil and protect it, or how to produce agricultural products economically without causing damage to the environment find answers in the technologies generated by the IAC.

The State of São Paulo could not produce the enormous variety of typical fruits of the most diverse climates if it were not for the extensive research at the Agronomic Institute. The introduction and adaptation of new varieties and genetic improvement allowed for the diversification of cultures, creating new options for producers and meeting the growing demand of consumers.

Keeping up with the demands of the industries, IAC has been offering state-of-the-art technology for the production of high-quality raw materials. In addition, the Agronomic Institute maintains one of the most complete collections of native and exotic plants in Latin America to recover degraded areas and form riparian forests.

The partnership between the IAC and the Brazilian cosmetics company Natura helped to develop and launch on the market a line of perfumes whose fragrance is unprecedented in the world.

The perfumes brands "Química do Humor" and "Urbano Noite" began to be researched in 2006 when a group of IAC researchers, of which Dr. Marcia Ortiz was a part, entered the Atlantic Forest biome in São Paulo State to search for plants with aromatic potential able to innovate the national perfumery. According to Dr. Ortiz, 120 species were selected by their smell. From then on, the process was long: obtaining the

essential oils, analyzing their chemical compositions, olfactory evaluations, etc. From the extraction of the plant to the flask, it took 12 years of work.



Researcher Dr. Marcia Ortiz is one of the authorities in Brazil when it comes to the development of new essential oils from Brazilian biodiversity for use in the perfumery industry.

The perfumes developed contain essential oil from Piper, which is a pepper from the Atlantic Forest, and have been a sales success up to today not only for the fragrance, unknown to the human sense of smell (among those catalogued in perfume bottles), but also for the quality of the products, as attested by experts in the field.

"Some people question the need for the Brazilian State to invest in research institutes. There are those who say that research does not give profit or financial return to society. Although generating profit is not the function of public institutions, it is not true that there is no financial return from research. In this specific case of the partnership with the Natura company, the IAC obtained a return in the form of royalties. In other words, the IAC has a share in product sales", explained Dr. Ortiz.

Dr. Ortiz makes a point of stressing that research on the Brazilian biodiversity carried out directly in the Atlantic Forest has always been associated with environmental preservation. For the manufacture of perfumes, for example, plants were not removed from the natural habitat of the Atlantic Forest. Instead, the IAC team developed planting technologies for Natura so that the company could cultivate and extract Piper pepper from its own greenhouses.

Dr. Marcia Ortiz is currently one of the most experienced researchers in Brazil when it comes to the development of new essential oils from Brazilian biodiversity for use in the perfumery industry.

IAC Award

Since 1994, the Agronomic Institute has offered the IAC Award in recognition of scientific merit in two categories: Support (technical or administrative) and Scientific Researcher.

Since 2001, this award has also been offered in recognition of scientific merit and institutional performance to professionals and institutions outside the IAC who are outstanding in agriculture in the State of São Paulo and in Brazil. The IAC aims to offer this award to honor external individuals or legal entities that, in the agricultural area, have distinguished themselves by their contribution in the scientific and technological spheres or in practical activities that promote the development of sustainable agriculture and the improvement of the farmer's income and of the agribusiness of São Paulo State.

This award is given to up to three individuals or institutions chosen from the following categories: Research Funding Agency, Special Highlight, Personality of Agribusiness, Personality of Research or Teaching or Extension, Parliamentarian linked to Agribusiness and/or to Science and Technology, and Rural Producer. Candidates are nominated by individuals or institutions linked to the Brazilian agribusiness, class entities, associations, unions, companies, cooperatives, universities, and research and rural extension institutions. The nominated names are evaluated by the commission in charge of the IAC Award, which is composed of employees of the Agronomic Institute and endorsed by its Board of Directors.

The IAC Award consists of a miniature of the D. Pedro II Building in bronze on black granite created by the artist Giuseppe Botica and executed by FUNDIART – Fundição Artística LTDA. The D. Pedro II Building, the first site to house the IAC headquarters, was built in 1888 in an art nouveau style and is protected by the Defense Council of the Cultural Heritage of Campinas (CONDEPACC) and by the Defense Council of the Historical, Archaeological, Artistic and Tourist Heritage (CONDEPHAAT).

The IAC Award ceremony is held during the formal sitting that closes the festivities to celebrate the Agronomic Institute's anniversary on June 27.

Medal Franz Wilhelm Daffert

In 2009, the "Franz Wilhelm Daffert Merit Medal" was instituted to honor personalities and institutions for their personal values and relevant services rendered to Brazilian agriculture.

Franz Wilhelm Daffert was the founder and first director of the Agronomic Institute. A young Austrian scientist with a doctorate in agricultural chemistry, he was hired by the Brazilian government to organize and direct the agronomic research institute. His management, considered admirable, was a period in which important transformations occurred in the institution, making it possible to better meet demands and improve services.

Under his direction, the Agronomic Institute was the first institution to perform soil and plant analysis in Brazil, receiving the Silver Medal for Soil Analysis at the 1904 Universal Exposition in Saint Louis, USA.