



## Corporación Biotec in Colombia's Regional and National Science, Technology, and Innovation System – STI

1. Corporación Biotec (CB) is a Research Center from Colombia's National STI System. CB has received official recognition as a Research Center by the Ministry of Science, Technology, and Innovation-Minciencias, renewed through **Resolution No. 0927- September 7, 2022**. CB's Board of Directors, chaired by the President of the University of Valle, comprises seven members representing its associates from the academic and research community and the business community. Under a special agreement, CB is based at CIAT, vía Cali-Palmira, since 1999.
2. CB has created a School of Thought on the basis of three pillars: 1) The value chain for research, technological development, and innovation; 2) The supply chain as the sectors concerned; and 3) The development of research and innovation within innovation systems. As of 2016, CB's mission is **building and optimizing BIO frontier research and innovation capacities to contribute to the agricultural re-conversion and bio-business acceleration, in sustainable agricultural systems with a high added value, for better living.** CB will be a benchmark for a sustainable tropical bio-economy.
3. CB updated its strategic approach for the period ranging between 2016 and 2026, as part of the institutional recognition renewal process. CB frames its Value Proposition under three strategies: **1) Sustainability of forest and fruit tropical production systems, 2) Agriculture and health: regional diet and social determinants of well-being, and 3) Natural ingredients for food and nutrition security, public health, and added-value industries**, within which it includes models, technologies, and demonstrative cases developed through the following priority themes:
  - Biotechnology in the supply chains of woody and promising fruit trees.
  - Innovation regarding agricultural production systems and ecosystem goods and services.
  - Innovation in natural ingredients and their derivatives with a potential for application in products with a high added value
  - Innovation for the optimization of the use of residual biomass.
  - Targeted management of BIO innovation.
4. CB has two research, technological development, and innovation groups:
  - The Group for biotechnology in the supply chains of promising fruit trees.
  - The Group for the bio-industrial cluster in western Colombia.
5. CB has developed a strategy for research, technological development, and innovation in sustainable agricultural systems with a high added value (SASAVA). Under this concept, research and innovation (R&I) has been developed using the supply chain of soursop (*Annona muricata* L.) as a model. To make the technology public, the patent for an invention entitled “Process for the *in vitro* clonal propagation of soursop plants using cyclic micrografting”, was granted to CB jointly with CIAT, by the SIC of Colombia, through Resolution No. 17204 of 2006. Within the policy of “valuation and protection” of knowledge, at present three patenting processes are in progress, jointly with Universidad del Valle: Natural ingredients from soursop (*Annona muricata* L.) , from peach palm (*Bactris gasipaes* Kunth) and pineapple (*Ananas comosus*).
6. Since 2010, Corporación Biotec has led the process to set up the Regional Innovation System for Agriculture, Agro-industry, and Bio-industry – SRIB, considering that a culture of innovation in the Bio sector and the contribution and use of enabling environments for the application of biotechnology and life sciences, are tools to enhance the growth and prosperity of the region, as they are essential conditions to strengthen the Corporation. Within this context, CB led the implementation of the Project:

**“R+D+I Capacity Strengthening for the Production of Natural Ingredients(NI) using Residual Biomass,Palmira, Cauca Valley, Western Region”**. Three prototypes of Natural Ingredients (NI) were developed, which patenting processes are in progress, in cotitularity with Universidad del Valle. A Model for NI production was registered as a trademark: UV/VB MODELO IN. These developments are the base for new research and innovation and for spinoffs and biobusinesses with national and international collaboration. From these results, CB have participated in alliances with partners, in three national calls, in which the results included the proposals in the “ bank of eligible projects”.

In partnership with CIAT, CB has developed the C-G HIGHVALBIO Mobility Project with the Leibniz Institute, Germany, through IPB-Halle. As part of this cooperation, CB is currently advancing in an initiative to obtain the metabolic profile of the chontaduro (*Bactris gasipaes Kunth*) jointly with UV Palmira headquarters and IPB of Halle. Several projects for the Pacific region are structured, inter-institutionally, with CIAT, Agrosavia, National Natural Parks-PNN, Gobernaciones of Valle del Cauca and Nariño, and communities from this region. CB builds its strength upon NI, exploring sources in marine, agricultural, and wild biodiversity, extracting and identifying secondary metabolites and other excipient components with functional and biological activities of interest.

7. CB, as an anchor Center, associatively developed, for the Universidad del Valle, in 2021, the conceptual design of the Center for Research and Innovation in Biosciences and Bioindustry- CIIBB, a strategic initiative of the University based at UV- Palmira. In the context of the “Mision de sabios 2019” and based on the recognition of the importance of the agricultural and agro-industrial sectors and rural development in Colombia, CB has been an active participant in the Bioeconomy Mission in Colombia, in an environment conducive to the offer of research and innovation in response to the demands of its partners and communities. CB participates in the regional Food systems analysis and transformation, with the Alliance FOLU-CIAT.
8. CB represents the research Centers at the STI body (CODECTI).  
CB promotes the Colombia Pacific Vision: Biodiversity-climate action-well-being as a collective initiative.  
CB is an active actor in the way to COP16-Biodiversity, national and internationally.

Corporacion Biotec has jointly developed models with inter-agency approval, which are available for the region and the country, to provide agriculture, agro-industry, and bio-industry with technological innovations, especially for rural development, such as site-specific agriculture for fruit trees: SSA-Fruits; Culture and the Healthy Agriculture; Technological innovation for agro-industrial companies with high added value in farmer economy-IECAM; Insertion of biotechnology and life sciences into rural basic education and the workshops “Biotechnology for non-Biotechnologists” and “biotecnologia para el desarrollo” (Biotechnology for Development). Corporacion Biotec features the BIOLAB laboratory for the analysis of pesticide residues and other analyses of interest to the market.

Corporacion Biotec supports its research and innovation with an in-house team and with an extensive cooperation network, as well as national and international public and private partnerships.

CB publishes six-monthly newsletters that are available at Corporacion Biotec's web page.

**Contacts:** Web site: <http://www.corporacionbiotec.org> - Emails: [usi4-biotec@cgiar.org](mailto:usi4-biotec@cgiar.org), [myriams@cgiar.org](mailto:myriams@cgiar.org)  
Phone: Mobile + 57 3174016368

CB, Santiago de Cali, April 2024.