

In order to guarantee our survival, technology transforms food production by controlling biotic and abiotic conditions to achieve the best results. The genetics of the crops were modified, pests, diseases and weeds are controlled, the times and quantities of irrigation required are determined, microclimates are created, a whole series of agronomic practices and management are applied. In the case of soil, deterministic constantly adds nutrients for the success of crops, and it is even replaced by substrates or nutritional substances that are easy to handle and more efficient.

Although Soil Science is reinvented by studying multiple current problems and topics of interest, soil is considered the key to mitigating the climate crisis, with the first 30 cm being where almost double the carbon in the entire atmosphere is concentrated. If this plays an important role in Climate Change, another obligation of agronomic technology, different from solving problems around food, is to convert the soil into the second largest natural CO<sub>2</sub> sink, followed by the oceans.

Therefore, this issue included different studies aimed at improving the quality and sustainability of soil. We hope to contribute with this collection of works to the knowledge of production systems and solutions to environmental problems.

For the fruit section, research on 'Hass' avocado was included, searching for elite rootstocks from avocado criollo accessions and the study of quality and fruit retention at two altitudes of the Colombian Andes.

In the case of the vegetable section, from a functional growth analysis, the diploid potato cultivars were evaluated: Paola, Violeta, Primavera and Paysandú; for bulb onions, the water footprint was determined under conditions in Samaca (Boyaca, Colombia); in the case of anthracnose in tomato, the biocontrol of *Cnidocolus urens* extracts in *Colletotrichum* spp. was evaluated, and finally, bibliographic reviews on the use of biofertilizers in beans with emphasis on desert areas along with the contamination of vegetables by heavy metals in urban and peri-urban areas.

Within the ornamental section, different doses and sources of nitrogen were evaluated in the growth of *Furcraea foetida*. In the section on aromatic, medicinal and spice plants, the effectiveness of two planting methods for the asexual propagation of Cannabis was determined.

Different works are part of the other species section, where a sensory analysis of cocoa liquor from different Colombian cultivars was carried out, the development of DRIS indices for oil palm, determination of the biostimulant activity of humic acids from vermicompost and lignite on corn, and the bibliographic review on molecular techniques for the identification of bacteria with agricultural potential.

Productive systems demand greater research approaches and must go beyond productivity, since, as several of the works in this issue point out, the economic, social, environmental and cultural importance of how, where and why we produce our food, although seems like an idealization, we must communicate it to all spheres of society.