

EDITORIAL

Editorial for *Trends in Horticulture* (Volume 6 Issue 2)

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The rapid pace at which science and technology are developing has made people more skilled at using cutting-edge technologies to increase the value and benefits of horticultural crops. This issue contains the most recent horticultural research findings, which include an intriguing investigation of the factors influencing the properties or growth processes of horticultural crops, methods for controlling and preventing pests and diseases of horticultural crops, the therapeutic and medicinal value of horticultural crops, and techniques for extracting beneficial components from horticultural crops. Reading the articles in this issue may be very beneficial to readers.

In horticulture, one of the main areas of research is crop cultivation. Horticultural crops' economic value is influenced by both their yield and quality. Many factors, including fertilizers and planting methods, can have an impact on the yield and quality of horticultural crops as they grow. While using fertilizers correctly is usually essential to growing high-quality crops, some researchers are dedicated to identifying fertilizer alternatives that can enhance the quality of horticultural crops even more effectively than fertilizers. According to Mohsenzadeh et al.^[1], biochar, derived from apple tree waste, and humic acid can be a replacement for the Hoagland nutrient solution to grow strawberries. Furthermore, the study's findings demonstrate that biochar and humic acid work well together as an organic hydroponic fertilizer to enhance the quality and yield of strawberries^[1]. This method also makes it possible to use garden waste more effectively^[1]. Choudhury et al.^[2] examine and evaluate the tolerance of multiple tomato genotypes to salinity, noting that salinity is a major factor limiting plant development at various stages, leading to poorer yield and productivity. And results demonstrate that the most effective methods for assessing salinity stress and identifying tomato genotypes that are salt-tolerant were to measure shoot length, leaf area, and shoot fresh and dry weight. These investigations can help to raise the quality and productivity of horticultural crops by using sound research techniques and fresh viewpoints.

Using the right techniques to prevent and control pests and diseases in horticultural crops is crucial and required to ensure the quality and yield of these crops. *Alternaria solani*, which causes early blight disease, is one of the deadly organisms that may reduce tomato crop yield by as

much as 80%, according to Kumar et al.^[3]. In order to solve the problem, they evaluate the effectiveness of several treatments in both in vitro and in vivo conditions^[3]. Furthermore, the findings demonstrate that, when applied at a weight percentage of 3.25%, biochar continuously shown exceptional efficacy against the early blight infection by inducing resistance and enhancing tomato plant performance^[3]. For individuals conducting study on disease prevention and pest control in horticultural crops, their examination may yield important insights.

Highlights of this issue include the investigation of medical and medicinal value as well as the extraction of valuable chemicals from horticultural crops, in addition to study on their production. Ilić and Vukotić^[4] state that one of the key causes of the widespread use of herbal products in the creation of dietary supplements and functional foods—which have pharmacological and physiological effects in addition to their nutritional value—is their enormous biological potential. The extraction process is now a major scientific endeavor, and “green” technologies have a unique place in modern science^[4]. They look at how extraction processes are now done and talk about the key extraction methods^[4]. Besides, Rajasekaran and Soundarapandian^[5] examine the nutritional and medicinal values of *Mangifera indica* L. fruit and point out that mangoes possess potential medicinal properties such as antioxidant, gastro-protective, anti-inflammatory, analgesic, immunomodulatory, anti-microbial, and many more. These studies show that various horticulture crops may have potential medicinal values and thus benefit mankind.

The novel concepts and insightful research findings could inspire researchers in related domains and offer helpful information to them.

Conflict of interest

The author declares no conflict of interest.

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