

Authentication and trade of true cinnamon: need for regulation and promotion of sustainable cultivation

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Humans have been incorporating spices into their diets for centuries. Initially, spices served to mask unpleasant flavours and odours in food, but over time, they became essential for enhancing taste and aroma. Cinnamon has been one of the most coveted spices globally for thousands of years, following black pepper. True cinnamon comes from the bark of *Cinnamomum verum*, a species native to Sri Lanka and often referred to as 'Ceylon cinnamon'. Due to the limited availability and ever-growing demand for Ceylon cinnamon, many similar-looking species from the *Cinnamomum* genus are falsely marketed as genuine cinnamon. This practice raises health concerns because these substitutes often contain coumarin, a potentially harmful compound. Consequently, there is a pressing need to ensure proper identification and regulation of cinnamon in trade to protect consumers and uphold quality standards.

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demand for herbal natural products and remedies, particularly those having immune-boosting properties^{4,5}. This trend would continue as there is an indication of a constant demand for herbal products in various sectors. However, asserting sustainability and quality control in the production and commerce of herbal products is important for ethical sourcing and safe usage. With the globalisation of the herbal market, there is a growing risk of genuine raw materials being mixed with adulterants or substitute components, posing a risk to health, safety and herbal efficacy⁶⁻¹⁰. Several safety-related difficulties have arisen due to improper or misleading authentication of the correct source plants. Therefore, proper identification of herbal plant species and their processing of basic ingredients are crucial for their safe and effective utilisation in contemporary medicines and health care^{11,12}.

Herbal plant authentication is a crucial step in quality control. It is a great challenge to authenticate herbal products from harvesting to end product, as herbal materials are mainly traded as dried parts or powders in different trade or vernacular names¹³⁻¹⁵. The World Health Organisation (WHO) provides guidelines for essential quality assurance/quality checks to maintain genuineness, purity, and safety for all herbal products and traditional medicines.