Review of: "Evaluation of Chemical Content and Phytochemical Composition of Yemeni Almond Cultivars"

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Potential competing interests: No potential competing interests to declare.

The manuscript titled "Evaluation of Chemical Content and Phytochemical Composition of Yemeni Almond Cultivars" by Muneer Mohammed Saleh Alsayadi et al. presents a thorough analysis of the chemical and phytochemical properties of nine local Yemeni almond cultivars. The study, published in Qeios, covers key parameters such as moisture, protein, fat, carbohydrates, ash, mineral content, total phenols, and total flavonoids. Yemeni almonds demonstrated unique nutritional properties, with protein content ranging from 12.7% to 19.57% and total fat content varying significantly between 36.87% and 64.71%. The almonds are also rich in essential minerals like iron, zinc, copper, and potassium. Notably, the high levels of phenolic and flavonoid content suggest strong antioxidant properties, with total phenolic content ranging from 9.9 to 113 mg GAE/g and flavonoid content from 47.7 to 63.00 mg RE/g. The study underscores the potential of Yemeni almonds in food and pharmaceutical industries and calls for further research to explore their full applications. The methodologies are detailed, ensuring reproducibility, although future studies could benefit from more extensive comparative analysis with international standards and broader regional sampling within Yemen. Overall, the manuscript provides significant insights into the potential of these local cultivars, positioning them as valuable resources for both local and international markets.