

Research Highlights

- Efficient *C. operculatus* extraction yields 17% polyphenols in dry material.
- *C. operculatus* extract has high polyphenol content & strong antioxidant properties.
- New edible coating formulation for preserving mangoes was achieved.
- Antioxidant properties of *C. operculatus* extract benefit mango in edible coating.
- The first evidence of *C. operculatus* extract's impact on an edible coating for mango.