

A Review on Extraction of Phytochemicals from Piper Betle L.

**Dhamdhere Om, Chaudhari Sanket, Rahane Sanket, Dhavale Anudip,
Jogdand Rohan, Ms. Prachi N. Padwal**

Samarth Institute of Pharmacy, Belhe, Maharashtra, India

Abstract: *Piper betle L., a tropical plant widely used in traditional medicine, contains a range of bioactive compounds with diverse pharmacological properties. Its leaves, which are commonly chewed with areca nut, have therapeutic effects, including antimicrobial, anti-inflammatory, and antioxidant activities. The extraction of these bioactive compounds is critical for their medicinal application and commercialization. Among various extraction methods, maceration is a traditional, simple, and cost-effective technique that has gained attention for extracting active constituents from plant materials. This review paper explores the principles of maceration as an extraction method, the bioactive compounds present in Piper betle, and the factors affecting the efficiency of maceration. It also highlights the applications of Piper betle extract in health and wellness industries and outlines future directions for enhancing extraction techniques.*

Keywords: Piper betle, maceration, extraction, bioactive compounds, traditional medicine, pharmacological properties.