

## REVIEW ARTICLE

# THE GENUS *LITSEA*: A REVIEW OF ITS CYTOTOXIC POTENTIAL AND PHYTOCHEMISTRY

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### ABSTRACT

The family *Lauraceae* includes various genus in which *Litsea* has around 200-400 varieties which are widely scattered in the tropical and semi-tropical zones. In China, *Litsea* species are used traditionally in many disease conditions such as bone pain, diarrhoea, edema, dyspepsia, gastroenteritis and colds. *Litsea glutinosa* has been traditionally used in the treatment of tumors by the local people of Chittagong Hill Tracts, Bangladesh. Also, 15 other *Litsea* species are reported to have cytotoxic activity against various cancer cell lines, making this genus a promising potential source of anticancer compounds. This review provides comprehensive information about the cytotoxicity potential of various species in the genus *Litsea* along with secondary metabolites responsible, and its potential utility in lung, breast, hepatocellular, ovarian, prostate, colon and cervical cancer therapeutics as a botanical product. The published cytotoxicity data of these plants are mainly based on *in vitro* studies with very few molecular levels and mechanistic studies conducted. The optimistic results of these 16 species open unexplored vistas of natural product chemistry and the anticancer potential of this genus.