



Review

Chemical Constituents and Biological Activities of Piper as Anticancer Agents: A Review

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Abstract

Cancer has become the primary cause of death worldwide, and anticancer drugs are used to combat this disease. Synthesis of anticancer drugs has limited success due to adverse side effects has made compounds from natural products with minimal toxicity gain much popularity. Piper species are known to have a biological effect on human health. The biological activity is due to Piper species rich with active secondary metabolites that can combat most diseases, including cancer. This review will discuss the phytochemistry of Piper species and their anticancer activity. The identification and characterization of ten active metabolites isolated from Piper species were discussed in detail and their anticancer mechanism. These metabolites were mainly found could inhibit anticancer through caspase and P38/JNK pathways. The findings discussed in this review support the therapeutic potential of Piper species against cancer due to their rich source of active metabolites with demonstrated anticancer activity.



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