Insights on Anticancer Activities, Associated Phytochemicals and Potential Molecular Mechanisms of Quisqualis indica: A Mini Review

ABSTRACT

Drug resistance is the main issue causing the treatment failure of anticancer drugs. This issue has urged researchers to search for new substances from medicinal plants, which are widely reported as the good sources of anticancer agents. Quisqualis indica is a plant belongs to Combretaceae family, known as Rangoon Creeper, which can be found abundantly in tropical countries and distributed profusely as a wild shrub. It has been widely used traditionally and scientifically claimed to process various therapeutic activities. It has recently been reported to possess various potential anticancer activities against different cancers. Looking at its availability in almost all seasons and grow fast, it is an arising source of herbal medicine in the discovery of anticancer drugs economically. Besides, Q. indica is enriched with several secondary metabolites of interest, which are responsible for the positive findings for its anticancer potentials. In this review, we aim to decipher and discuss the anticancer activities of Q. indica crude extracts and isolated phytochemicals as evidenced in preclinical models, as well as the associated molecular mechanisms. More preclinical investigations on its anticancer potentials should be conducted before translation to clinical testing.