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ACCEPTED MANUSCRIPT

Biofilm inhibition mechanism from extract of *Hymenocallis littoralis* leaves

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Abstract:

Ethnopharmacological relevance: Hymenocallis littoralis (Jacq.) Salish. has been referred as beach spider lily and commonly known for its rich phytochemical diversity. Phytochemicals such as alkaloids, volatile constituents, phenols, flavonoids, flavonols extracted from different parts of these plants like bulbs, flowers, leaf, stem and root had been used in folk medicines from ancient times because of their excellent antimicrobial and antioxidant properties. The leaf and bulb extract of H. littoralis plant was traditionally used for wound healing. Alkaloids extracted from bulb of this plant possess anti-viral, anti-neoplastic and cytotoxic properties. However, these phytochemicals have also shown antibiofilm activity, which is considered as one of the important factor accountable for the drug resistance in microorganisms. Thus, the investigation of medicinal properties of H. littoralis could be useful to control biofilm producing pathogens.

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