Antibacterial test and toxicity of plant seed extracts: a review

ABSTRACT

Allah has instructed all humankind to eat permissible healthy food according to His guidance as narrated in Al-Quran. Following Maqasid as-Shari'ah, it is a Darruriyyah to ensure the safety of food as an act of protecting life. Therefore, the application of antibacterial agent on food aims to improve the consumers' health and control the herd immunity. Plant seed is a newly emerged alternative as a source of antibacterial agents. Commonly discarded, the utilisation of plant seed will not only reduce environmental waste issue but also benefited economically to many industries. This article was aimed to review the current literature on antibacterial test and toxicity of various plant seed extracts that potentially contributed to the efficacy of the seed. This review presents a comprehensive analysis of the antibacterial activity assay of the plants' seeds. It covers endpoint and descriptive methods, plant seed toxicity and application of the seed extract in food industries. This review was conducted using the various science-based platform such as Science Direct, Google Scholar, Emerald etc. The keywords 'antibacterial', 'antibacterial seed', 'seed extract' and 'toxicity seed' was used in this search.

Keyword: Seed; Antibacterial test; Toxicity test; Extraction