

## The Janus Corner



This occasional section within the journal surveys visions and achievements, often not on the main track of the developing biomedical sciences, but all relating to discoveries and developments of medicinals – both ancient and modern. What they have in common, in one way or another, is providing further background and glances around the edges of the core discipline of pharmacognosy, as it has been and continues to evolve within our times.

## Oceanic Medicinal Plants as Antidepressants

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The Oceanic region is a botanically-rich area comprising four main regions; Australia, Polynesia, Micronesia and Melanesia. Recently, a review was published that describes several region-specific plants significant in the treatment of depression. Traditional medicines are largely overlooked as treatment options for depression, despite being extensively recognized as effective alternatives. In fact, the use of the Polynesian Kava Kava plant is one of the best known and well-documented examples of Oceanic medicinal plants (Cock and Cheesman, 2016). Despite this, most work concentrates on Asian traditional medicines and plants due to their extensive, recorded use over a long period. Nevertheless, Oceanic plants offer great therapeutic alternatives and the authors highlight some major plants specific in the treatment of depression. Though not all-inclusive, the review selects major representative plants and provides backgrounds

of each (including colour pictures) as well as chemical structures of compounds relevant as antidepressants. Additionally, the chapter is written in such a way that it is useful for both researchers and clinicians alike. It is logically set out and encompasses sections on plant usage, pharmacology as well as detailing the phytochemistry of each plant. Overall, it is a fantastic review that combines knowledge of oceanic plants from various sources and highlights the benefit these have as antidepressants.

### REFERENCE

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# Kakadu Plum Extracts Inhibit the Microbial Triggers of Multiple Sclerosis

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Multiple Sclerosis (MS) is an autoimmune disorder with strong respiratory and neurological involvement. Currently, there is no cure for MS and present treatment strategies include the treatment of symptoms associated with the disease. Several opportunistic pathogens can become highly virulent in genetically susceptible patients and a pharmacognostic approach into treatment of these was undertaken by Dr. Ian Cock and co-authors [1]. Through evolution, many plants have developed antimicrobial agents that act as a biological defence mechanisms. In combination with pathogens associated with MS, the authors investigate the potential of a well-known antimicrobial plant, *Terminalia ferdinandiana* (commonly known as Kakadu plum). The Kakadu plum is an endemic Australian plant with known antimicrobial properties (2, 3). The study provided a phytochemical characterization of the Kakadu plum fruit compared to the plants leaf, a novel characterization that had not been previously explored. Using GC-MS and LC-MS, the authors determined a series of organic compounds likely to have potential as antimicrobial agents. This scientific inquiry provides the basis for the possible use of

these compounds as effective treatments against pathogenic bacteria in immunocompromised patients. The authors highlight the need to further investigate natural resources as an alternative to traditional antibiotics. Overall, the study is well-written and provides insights into the use of natural fruit and plant extracts in the treatment of pathogens associated with MS.

## REFERENCES

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3. Wright MH, Sirdaarta J, Matthews B, Greene AC, Cock IE. Growth inhibitory activity of Kakadu Plum extracts against the opportunistic pathogen *Clostridium perfringens*: New leads in the prevention and treatment of clostridial myonecrosis. *Pharmacognosy Journal*. 2016; 8(2): 144-153. DOI: 10.5530/pj.2016.2.8