

New plant-derived substance shows promise as a new therapy option for MS

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New research has just been released which has shown that a new plant derived compound can delay and reduce MS symptoms in an animal model of MS. Natural products continue to play an important role in modern drug discovery, the natural flora and fauna of the world continue to provide chemists with novel chemical compounds, some which may have therapeutic benefits.

An international research team including researchers from the University of Queensland have been testing a plant derived compound known as 'kalata B1'. They believe it may have some anti-inflammatory properties.

In their study, recently published in the prestigious medical journal [*Proceedings of the National Academy of Science*](#), they tested whether kalata B1 was safe in a animal model of MS and whether it would have any impact on animals which have an MS like illness.

They showed that this plant derived substance does act to slow down the activation of immune cells in the body and since MS is the result of an over activation of the immune system, it might make a possible therapy for MS.

These preliminary studies suggest that kalata B1 does not appear to have any significant side effects, and it appears to reduce the number of damaging immune cells present in the brain. Additionally, it appears that kalata B1 did reduce inflammation in the brain and spinal cord and reduce the damage to the myelin sheath when compared to no treatment. Progression of disease in this MS-like illness was also slowed.

When the compound, which is taken orally, was compared to the existing oral MS treatment Gilenya (fingolimod), it was found to be similar in its effectiveness. Which is important as Gilenya is one of the few oral treatment that is currently clinically approved to treat people with relapsing remitting MS.

While there are a number of treatments already available for the treatment of MS, they all can have side effects and not all can be taken orally. Additionally, not all patients with relapsing remitting MS can be treated successfully using the currently available therapies. Therefore new treatments, especially tablets or capsules, are still needed. And while it is many years away from being used in a clinical setting, this type of research study is the important first step in determining whether a substance may provide the basis of a new therapy for MS in the future.