

## عنوان مقاله:

Assessment of immunomodulatory activity of aqueous extract of Calamus rotang

## محل انتشار:

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## خلاصه مقاله:

**Objective:** There are a number of medicinal plant products which has been used to treat various immunological diseases. Out of these medicinal plants, Calamus rotang has shown several medicinal properties including anti-viral, anti-diabetic, anti-inflammatory effects. Normally, the roots of C. rotang are used in various ailments to cure piles, burning sensation, cough, leprosy and bleeding disorder and also it was used in the treatment of inflammation. In the present study, our group were investigated the immunomodulatory activity of aqueous extract of C. rotang root in human whole blood and peripheral blood mononuclear cells (PBMC) using hepatitis B vaccine (HBsAg) as an antigen. **Materials and Methods:** Variable doses of root aqueous extract (0.5 – 30 mg/ml, 100 µl) was administered to human whole blood and PBMC using hepatitis B vaccine containing surface antigen (HBsAg; 20 µg/ml, 10 µl) as specific antigen in order to estimate the total blood counts in human whole blood and nitric oxide production and CD14 FITC surface marker from human PBMC. **Results:** Overall, the results showed that roots aqueous extract of C. rotang showed remarkable increase in the number of blood counts in human whole blood at lower doses (0.5 mg/ml). In addition, root aqueous extract of C. rotang also showed the same pattern in case of nitric oxide production and estimation of CD14 FITC surface marker in human PBMC. **Conclusion:** Altogether, the results suggest that root aqueous extract of C. rotang showed immunomodulatory activity.

## کلمات کلیدی:

Calamus rotang, Immunomodulatory, Aqueous extract, PBMC, Hepatitis B vaccine

## لینک ثابت مقاله در پایگاه سیویلیکا:

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