Study: Bee Pollen Extract 'Potential Tool to Treat Allergies'



Anti-allergic Effect of Bee Pollen Phenolic Extract and Myricetin in Ovalbumin-Sensitized Mice J Ethnopharmacol, 2008 Jun 6

The bee pollen is used in folk medicine to alleviate allergic reactions. The bee pollen phenolic extract (BPPE) consists in phenolic compounds (flavonoids) from plants picked by Apis mellifera bee.

Aim of This Study: Here we evaluated the anti-allergic property of the BPPE and the flavonoid myricetin (MYR) in murine model of ovalbumin (OVA)-induced allergy.

Materials and Methods: The study focused on the BPPE or myricetin treatment of OVA-sensitized BALB/c mice and their effects on the immunoglobulin E (IgE) and immunoglobulin G1 (IgG(1)) production, pulmonary cell migration, eosinophil peroxidase (EPO) activity and anaphylactic shock reaction.

Results: The BPPE treatment (200mg/kg) showed inhibition of the paw edema, IgE and IgG(1) OVA-specific production, leukocyte migration to the bronchoalveolar lavage (BAL) and EPO activity in lungs. In addition, BPPE treatment showed partial protection on the anaphylactic shock reaction induced by OVA. Treatment with myricetin (5mg/kg) also inhibited pulmonary cell migration and IgE and IgG(1) OVA-specific production.

Conclusions: These results support the hypothesis the myricetin is one of the flavonoids of BPPE responsible for the anti-allergic effect and a potential tool to treat allergies