### Purification and characterization of storage proteins from lemon seeds

**Abstract**

The aim was to purify and characterize storage proteins from lemon seeds, including 11S globulin, 7S globulin and 2S albumin, both biochemically and immunologically. It was also of interest to examine the potential cross-reactivity between the same proteins from cashew nut. Proteins were extracted from lemon seeds, and then chromatographic techniques were used to purify the proteins. MALDI-TOF and SDS-PAGE were used for the characterization. Finally, the proteins were used in an immunoassay where levels of specific IgE in human serum samples were determined. IgE-levels towards lemon seed storage proteins were compared with cashew nut homologs to investigate if they correlate.

**Keywords**

Food allergy, ImmunoCAP, IgE, seed storage protein, component resolved diagnostics

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