



## Natural bioactive compounds as plant growth regulators

Ioana IGNAT, Alina STINGU, Irina VOLF, V.I.POPA – “Gheorghe Asachi” Technical University

Polyphenolic compounds are biosynthesized in plant as secondary metabolites, having an important role in sensorial and nutritional quality of fruits, vegetables and plants. In this work, the phenolic extracts were obtained from three different sources: *Asclepias syriaca*, grape seeds and spruce bark. The efficiency of different extraction techniques of polyphenols, such as heat extraction and ultrasound assisted extraction was studied and the influence of extracts was followed in the case of *Phaseolus vulgaris* seed germination tests. Radicles elongation and fresh biomass were determinate. Polyphenols may act as biostimulators or growth inhibitors in plants depending on the extract concentration applied.