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Poster Abstract - B.38

EVALUATION OF SAPONINS AND SAPOGENINS IN FOURTEEN SPECIES OF ANNUAL MEDICS

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Fourteen species of annual medics (*Medicago* spp.) were investigated at flowering time and at the end of their biological cycle (senescence). Total saponins in the aerial part of the plants were extracted, quantified and biochemically characterized. Saponin content in *Medicago* species is known to vary according to genotype, tissue type and stage of plant growth. In fact, saponin content increases with the age of plant. In this investigation, different methods were used for the qualitative and quantitative determination of saponins. By thin layer chromatography (TLC), all the saponins were identified at fowering time and at full senescence, and the medic species were compared for their saponin patterns at each growth stage. After acid hydrolysis, all the sapogenins obtained were identified and quantified by gas chromatography (GC) and gas chromatography/mass spectrometry (GC/MS). The species were compared for their content in medicagenic acid, hederagenic acid, oleanolic acid, zanhic acid and different soyasapogenols.