Biological and Chemical Study of *Astragalus gombiformis*

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Extracts of aerial parts and roots of wild *Astragalus gombiformis* Pomel were tested for their antibacterial, antioxidant, and insecticidal activities and contents of phenolic compounds. Antibacterial activity was tested by the paper disk agar diffusion method and determination of the minimal inhibitor concentration. Among the tested extracts, three extracts (methanol, chloroform, and ethyl acetate) from aerial parts and two extracts (water, methanol) from roots exhibited diameters of inhibition zone equal or above 12 mm (at 150 μ g/ disk) and minimal inhibitor concentrations ranging between 233 and 1250 μ g/ml. Spectrophotometric and HPLC analyses showed that contents of both total polyphenols and flavonoids, as well as antioxidant activity were higher in the methanolic extract of aerial parts as compared to roots. No insecticidal activity of the extracts of the aerial parts was found against *Culex pipiens*.

Key words: Antibacterial, Insecticidal, Antioxidant, Astragalus gombiformis