E J Llorent-Martinez et al., Chem Sci J 2017, 8:2(Suppl)
http://dx.doi.org/10.4172/2150-3494-C1-009



# Phytochemical composition, antioxidant activity and enzyme inhibitory properties of *Lathyrus* species: Potential sources of bioactive compounds

**E J Llorent-Martinez**[1], **G Zengin**[2], **L Molina-Garcia**[1] and **M L Fernández-de Córdova**[1]
Jaen University, Spain
[2] Selcuk University, Turkey

Many wild plants commonly used in folk medicine, such as different species from the genus *Lathyrus*, may represent new sources of biologically active compounds. Therefore, the study of the composition and (bio)chemical behaviour of extracts from these plants may provide valuable information. Several *Lathyrus* species have been studied: *L. aureus, L. pratensis, L. czeczottianus* and *L. nissolia*. Extracts from these plants were analyzed by high-performance liquid chromatography with electrospray ionization mass spectrometric detection (HPLC-ESI-MSn) to determine their phenolic profile. The *in vitro* antioxidant activity and enzyme inhibitory evaluation were also investigated. The main phenolic compounds (flavonoids and saponins, mainly) and the antioxidant and enzyme inhibition results are here reported. The phenolic contents and the (bio)chemical properties of the analyzed extracts presented significant variations in the different *Lathyrus* species. However, the high number of phenolic compounds and the antioxidant and enzyme assays suggest that these plants may be further used in phytopharmaceutical or food industry applications.

## Biography

E J Llorent-Martinez completed his PhD studies in Analytical Chemistry at the University of Jaén, and continued his research in the University of Madeira, University of Castilla-La Mancha and University of Jaén. He has published more than 60 papers in reputed journals and has been serving as an editorial board member of two scientific journals for several years. His main research involves the analysis of the (bio)chemical composition of plants and food.

ellorent@ujaen.es

**Notes:**