

7th International Conference and Exhibition on
PHARMACOLOGY AND ETHNOPHARMACOLOGY
&
**5th GLOBAL PHYSIOTHERAPY, PHYSICAL
REHABILITATION AND SPORTS MEDICINE**

March 27-28, 2019 | Amsterdam, Netherlands

Domenico Trombetta, Asian J Biomed Pharmaceut Sci 2019, Volume 9 | DOI: 10.4066/2249-622X-C1-017

THE PROBLEM OF MISIDENTIFICATION BETWEEN EDIBLE AND POISONOUS WILD PLANTS: REPORTS FROM THE MEDITERRANEAN AREA

Domenico Trombetta
University of Messina, Italy

Today, in many European countries, people are looking for wild edible plants to experience new tastes and flavours, by following the new trend of being green and environmentally friendly. Inexpert pickers can easily confuse young borage and spinach leaves with those of other plants, including poisonous ones such as *Mandragora autumnalis* Bertol (mandrake) or *Digitalis purpurea* L (foxglove), common in southern and northern Italy respectively. In the last twenty years, several cases of intoxication by accidental ingestion of mandrake and foxglove have been reported. Furthermore, recently several cases of intoxication with soups or prepackaged salads have occurred through the exchange of edible with toxic plants. The purpose of this work was to perform a pharmacognostic characterization of young leaves from borage, mandrake, foxglove and spinach, by micromorphological, molecular and phytochemical techniques. The results showed that each of the three techniques investigated could be sufficient alone to provide useful information for the identification of poisonous species helping the medical staff to manage quickly the poisoned patients. However, the multi-disciplinary approach proposed could be very useful to assess the presence of poisonous plants in complex matrices, to build a database containing morphological, molecular and phytochemical data for the identification of poisonous species or in forensic toxicology, given their increasingly frequent use due to their low cost and relatively common availability.

BIOGRAPHY

Domenico Trombetta completed his PhD in pharmacognosy, currently he is working as an associate professor of pharmacology and pharmacotherapy at the department of chemical, biological, pharmaceutical and environmental sciences of the University of Messina, Italy and member of the PhD College in "Applied Biology and Experimental Medicine". The research group who coordinates deals mainly with the study of functional foods and design, development, production and testing of nutraceuticals both from a chemical-pharmaceutical point of view (purity, stability, compatibility between the constituents) than from the tolerability/safety and efficacy on humans.

dtrombetta@unime.it



Note: