



Multiresidue screening analysis of pesticides in phytotherapics by HPLC - MS/MS and GC/MS

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Abstract:

The active principle of the phytotherapics medicines are derived exclusively from herbal drugs. The use of phytotherapics has increased in the worldwide medicine, rendering important security issues in its development to final product. The pesticide residue is a factor that affects the quality of these medicines, due the absorption of pesticides and its metabolites in plants 1. The ANVISA (Agency of National Health Surveillance) regulates the quality medicine in Brazil. Recently this agency released the resolution - RDC n° 105 due to January 1st, 2018, where the pesticide residue analysis should be monitored in plant species used to phytotherapics 2. The two brands of commercial phytotherapeutic available in drug stores were evaluated in this project, both have passion flower as the active principle. These medicines are most commonly used as anxiolytic. Therefore, this work aims to perform a multiresidues screening analysis of pesticides (acids, phynylureas, organophosphoric, triazines and carbamates) in phytotherapics. Samples will be prepared using QuEChERS (Quick, Easy, Cheap, Effective, Rugged and Safe) technique and analyzed by HPLC - MS/MS and GC/MS 3.

Keywords: Phytotherapeutic, Passion flower, Pesticides, HPLC-MS/MS, GC/MS

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Brazilian Proficiency test for Drugs of Abuse in Urine and hair matrix validated by LCMSMS

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Abstract:

All laboratories that provide toxicology drug tests should be evaluated in a proficiency test (PT), according to local regulations. Two new Brazilian laws (Ordinance 116, November 13th 2015 and CONTRAN Resolution N° 529, May 14th 2015), that regulate professional drivers routine, are requesting now a mandatory toxicology test in hair or body hair (large window detection test) and, for both of than, a PT is a request for the test execution. Considering that, a certified (ABNT NBR ISO/IEC 17.043:2005)[1] local proficiency test provider should support the labs making available a "gold standard"