QUALITY OF PROPOLIS FROM SANTA CATARINA STATE ACCORDING TO THE NORMATIVE TO APIARIAN PRODUCTS IN BRAZIL

Tomazzoli, M.M., Somensi-Zeggio, A.R. Silva, D.A., Veloso, A.C., Maraschin, M.
Plant Morphogenesis and Biochemistry Laboratory, Federal University of Santa Catarina, Florianopolis, Santa Catarina, Brazil.

In order to regulate the quality of apiarian products in Brazil, the Agriculture Ministry published the normative nº3, in January 2001. Among the parameters requested for evaluation are mentioned the content of flavonoids (minimum of 0.5%; m/m); total phenolics (minimum of 0.25%; m/m), and dry extract (minimum of 11%, m/v) for propolis extracts. Aiming at to check whether 71 propolis samples (n = 19 autumn, n = 16 winter, n = 19 spring, and n = 17 summer, 2010) produced in Santa Catarina (SC) State (southern Brazil) comply with the normative legislation to that biomass, ethanolic extracts (20 mg propolis/ml - EtOH 70%, v/v) were analyzed by UV-spectrophotometry as to their contents of total phenolics and flavones. Dry extract was determined evaporating 5 ml of extract until constant weight. All the samples met the legal criterion regarding the content of phenolic compounds. Contrarily, some samples from autumn (14), winter (12), spring (10), and summer (9) showed the minimum values for the flavonoid concentration. Concerning the dry extract yield, all winter-samples reached the minimum recommended, but one sample was always reproved for the other seasons. These results demonstrate that the flavonoid content was the critical point to reprove the samples in study. Interestingly, it is well described in literature that tropical propolis usually do not present appreciable amounts of flavonoids, which turns questionable a minimum content of that secondary metabolites as a trait for quality control of propolis extracts from tropical regions.