Abstract

The fluminense vegetation, more specifically the flora from the Jurubatiba restinga has been investigated by a multidisciplinary team of botanists, chemist, radiobiologist, insect physiologists and geneticist. Vouchers of 564 specimens have been collected, identified, organized in an herbarium, and a database is being build up containing, in addition to classical botanical data, chemical data and information on the potential economic use either for landscape gardening, alternative foods or as medicinal plants. Phytochemical studies of the Guttiferae, Clusia hilariana, yielded oleanolic acid and nemorosone. Their biological activities against the haematophagous insect Rhodnius prolixus vector of Chagas disease have been investigated. Finally, it has been observed that aquatic plants possessed high levels of the natural radionuclide polonium-210, which seems to be originated mainly from soil rather than from atmospheric supply.

Keywords

taxonomy, economic use, oleanolic acid, nemorosone, polonium-210, biological activities.