Parasitic castration entomógena in neotropical species: Models malpighiaceae of salt marshes

Plant reproductive organs are considered very sensitive to the action of midges and depending on the induced change level, leads to parasitic castration phenomenon causing the prevention of sexual reproduction of plants. Few models of floral galls have been described for neotropical regions, however, the salt marshes of Marica and Grumari, State of Rio de Janeiro, were recorded and described floral galls on Byrsonima sericea DC. and Niedenzuella acutifolia (Cav.) W.R.Anderson (Malpighiaceae). In B. sericea has identified the occurrence of three floral galls, induced by insects. In the gall-induced Diptera larvae developed in the pocket by inhibiting the development of pollen and ovules. In galls induced Lepidoptera, the larva settles on pedicel, excavating the central bud, preventing the formation of the pistil. In the third gall, the larval chamber is formed at the apex of the floral button receptacle, leading to no training in their reproductive structures. In all, the cup and the corolla form ,, with varying degrees of atrophy in each type of gall. N. acutifolia occur two floral galls. In galls induced by Diptera, the pistil hypertrophy, forming sheetlike structures where there are the larval chambers. In other galls, only the cup develops and sepals are welded, forming a chamber and no other whorl forms. In the five galls analyzed, changes in varying degrees in the differentiation of floral structures led to parasitic castration, because none of the flower buds affected by midges are able to complete its development, affecting the reproductive success.

Biography

Ana Cláudia de Macêdo Vieira has completed his PhD at the age of 36 years from University of São Paulo, Brazil. She is associate professor at the School of Pharmacy of the Federal University of Rio de Janeiro and coordinates the pharmacobotany Laboratory, where she develops research with galls on sandbank environment, control of drugs and medicinal plants. Develops university extension projects with rational use of medicinal plants and unconventional food plants to farmers.

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