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Terminalia albida leaf is medicinal plant used at Guinea-Bissau to treat eye diseases [1] and a significant anti-bacterial activity of it was already been reported [2]. In order to allow its use as a possible herbal substance, quality control parameters must be established. In the present work results concerning the botanical identification of *T. albida* dried leaf entire or fragmentized were presented. This plant is also used in Gambia to treat malaria and also for hiccups, back and stomach pain [2,3]. Samples selected according to European Pharmacopoeia [4] were observed with naked eye and by optical stereomicroscopy, light microscopy and scanning electronic microscopy. The leaf, petiolate, showed 10-16.5 cm in length and 3-5 cm in breadth, narrowly oblong or elliptic lanceolate blade, with acuminate apex with narrowly rounded base and entire margin; upper surface was smoothy and shiny and lower face showed large non-glandular trichomes; Nerves are pinnate, slightly prominent, 12-17 pairs of secondary veins. Leaf transverse section showed adaxial epidermis, abaxial epidermis, and mesophyll differentiated into palisade and irregular parenchyma. The lower epidermal layer shows anomocytic stomata (arithmetic-mean = 32 stomata/nm^2). Polygonal cells were observed in adaxial epidermis, 21.4 cells/ 100 µm^2 (σ=±3.7). Non-glandular unicellular trichomes were present in lower epidermis. Unicellular, cup-shaped scales (arithmetic-mean: 15.69 µm head diameter; 14.66 µm base length), were observed mostly inserted in upper epidermis, with yellowish substance inside. Calcium oxalate cluster crystals (arithmetic-mean 30.3 µm diameter) in upper epidermis, palisade parenchyma, a characteristic giant xylem vessel (arithmetic-mean 112.26 µm diameter) and also several small dimension xylem vessels disposed radially were observed. Occasionally, it was noted the presence of domatia. Obtained results are useful and must be considered in a future *T. albida* leaf quality monograph.

Keywords: *botanical identification; Combretaceae; microscopy; quality control; Terminalia albida;*

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P2B37 **Therapeutic potential of pollen**

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The aim of this study was to evaluate the potential of phenolic compounds of Portuguese flora as a source of flavonoids for use in research of new active molecules using a previous screening by HPLC/DAD. Some of these compounds have bioactive properties as antioxidant and will study in order to determine its anti-inflammatory action. On the other hand, for example, flavones are possible research targets with benzodiazepine-like ac-

tivity and isoflavones as estrogen-like. When these molecules appear much methylated or hydroxylated, anti-redox potential and antibacterial ability can be assessed. The samples were collected directly into stamens of plants and served as the basis for identification of pollen material collected by bees. The samples analyzed were: *Carpobrotus edulis* (L.) N.E.Br., *Tilia* spp., *Viburnum tinus* L. and *Opuntia* spp. Approximately 10 mg of pollen sample are dried and extracted with 50% ethanol (1:1, v/v), after was assisted by ultrasonication (30 min), centrifuged at 5000 rpm during 10 min and the supernatant used for HPLC/DAD according Campos and Markham [1]. The compounds structures were determined by UV absorption spectroscopy according Campos and Markham [1]. The more flavonoids common structure in the samples was of 3-*O*-glycosides of quercetin and kaempferol, and phenolic polymers acids. The less common structure is a derivative of kaempferol that have derivatization at the ring in C6 or C8 alkyl, which makes evident for further evaluation of their therapeutic activity, for the ability to GABAa binding receptors may be one of the possibilities. The studied species present a probability of being able to establish a relationship with greater therapeutic potential (Figure 1).

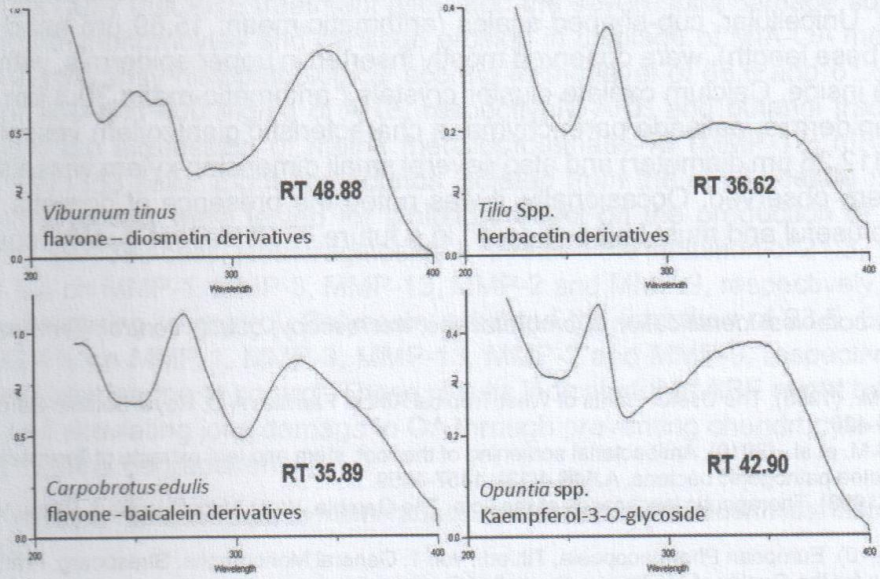

Figure 1. Spectra for the less common structure identification.

Keywords: *Pollen, phenolic compounds, flavonoids, HPLC/DAD*

References:

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P2B38 Identification of multiple anti-inflammatory mechanisms and molecular targets of the herbal medicinal product Bronchipret® TP *in vitro*

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