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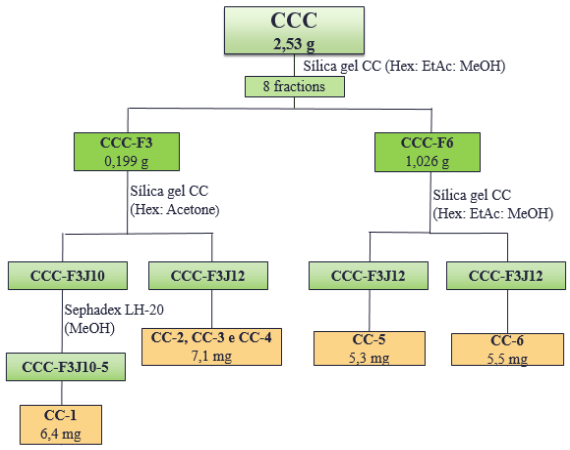
FLAVONOIDS FROM *Chromolaena congesta* (ASTERACEAE)

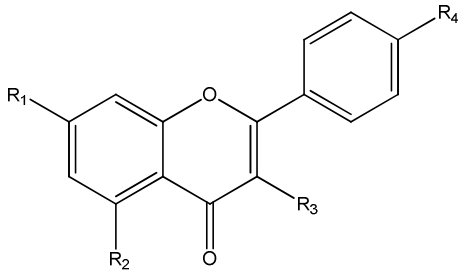
Debora Cristina Baldoqui[1](PQ), Josiane Aline Monteiro de Oliveira[1](PG), Isabela de Carvalho Contesoto[1](IC), Marta Regina Barrotto do Carmo (PQ) [2], Maria Helena Sarragiotto[1](PQ)

[1]State University of Maringa, Maringa, Brazil. [2]State University of Ponta Gross, Ponta Grossa, Brazil.
E-mail: dcbaldoqui@uem.br

The genus *Chromolaena*, belonging to the Asteraceae family, comprises 71 species, of which 45 are endemic to Brazil [1]. Chemical studies on this genus revealed the occurrence of sesquiterpene lactones, germacrenos, prostaglandins, as well as fatty acids and flavonoids [2-4]. *Chromolaena congesta* is a shrub native of Brazil, distributed in the Northeast, Southeast and South regions. There are no reports in literature on the chemical study of this species. Therefore, the present study aims to identify the main secondary metabolites of *C. congesta* and has been conducted on the chloroform fraction. The study of chloroform fraction (CCC), obtained from *Chromolaena congesta*, is shown in **Scheme 1**. Phytochemical study of *Chromolaena congesta* chloroform fraction led to the isolation and structure elucidation of six flavonoids (**Figure 1**), known in the literature as: kaempferol-3-methyl ether (**CC-1**), genkwanin (**CC-2**) kumatakenin (**CC-3**) acacetin (**CC-4**), apigenin (**CC-5**) and 4'-hydroxy-5,7-dimethoxyflavone (**CC-6**). Reports have shown that flavonoids have important biological activities such as anti-inflammatory, antibacterial, anti-allergic, antiviral and vasodilator [5]. The present work contributed to a better understanding of the value of Brazilian biodiversity, since it is a species never before studied, in the chemical and pharmacological point of view. Furthermore, the isolation of flavonoids is consistent with the secondary metabolites reported in other studies of this genus.



Scheme 1. Fractionation of chloroform fraction of *Chromolaena congesta*



(**CC-1**) R_1=OH R_2=OH R_3=OCH_3 R_4=OH
(**CC-2**) R_1=OCH_3 R_2=OH R_3=H R_4=OH
(**CC-3**) R_1=OCH_3 R_2=OH R_3=OCH_3 R_4=OH
(**CC-4**) R_1=OH R_2=OH R_3=H R_4=OCH_3
(**CC-5**) R_1=OH R_2=OH R_3=H R_4=OH
(**CC-6**) R_1=OCH_3 R_2=OCH_3 R_3=H R_4=OH

Figure 1. Isolated flavonoids of *C. congesta*

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