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CHEMICAL CONSTITUENTS OF *ARISTOLOCHIA CORDIGERA*

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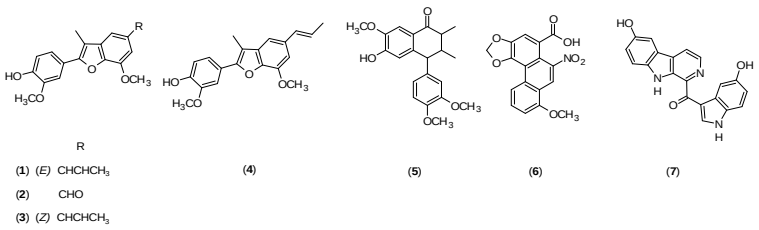
Abstract: Hundreds of compounds in diverse chemical classes have been isolated from Brazilian Aristolochia species. They include phenanthrene substituted with nitro, acid, carboxylate, and ester groups; these aristolochic acids (AAs) are considered biomarkers of the Aristolochia genus [1]. In addition, several of these species are rich sources of lignoids, apparently derived from propenylphenols without oxygenated functionalities at C-9,C-9' [2]. As part of our continuing studies on *Aristolochia*, we have examined the chemical constituents of *Aristolochia cordigera*. The roots of *A. cordigera* were dried, ground, and extracted successively at room temperature with *n*-hexane, acetone, and EtOH. The profiles of these extracts were obtained by HPLC-DAD-ESI/MS and ^{1}H NMR analyses. The EtOH extract was subjected to chromatographic procedures (CC, TLC followed by semi preparative HPLC) to give five lignoids (**1**-**5**), one aristolochic acid (**6**), and one alkaloid (**7**). The structures of the compounds were determined based on spectroscopic analyses (MS, ^{1}H and ^{13}C NMR) and on comparisons of their data with those reported in the literature [2-3]. It was observed that the new neolignan **3** readily undergone conversion into **1** during the isolation procedures. The alkaloid **7** was isolated for the first time from Aristolochiaceae species. Reports on the occurrence of **7** have been restricted to marine sponges *Hyrtios erectus* and *Hyrtios reticulatus* [4].

Figure 1. Chemical structures of compounds **1**–**7**



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