Ancistrotanzanine A, the First 5,3‘-Coupled Naphthylisoquinoline Alkaloid, and Two Further, 5,8‘-Linked Related Compounds from the Newly Described Species Ancistrocladus tanzaniensis

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Abstract

The first phytochemical investigation of the recently discovered East African liana Ancistrocladus tanzaniensis is described, resulting in the isolation and structural elucidation of two new naphthylisoquinoline alkaloids, ancistrotanzanines A (**5**) and B (**6**), and the known compound ancistrotectoriline A (**7**). Ancistrotazanine A (**5**) represents a hitherto unprecedented 5,3‘-coupling type between the naphthalene and isoquinoline portions, while **6** and **7** are 5,8‘-coupled. The structures of the compounds were determined by spectroscopic, chemical, and chiroptical methods. Compounds **5** and **6** showed good activities against the pathogens of leishmaniasis and Chagas' disease, Leishmania donovani and Trypanosoma cruzi, while **5**−**7**displayed moderately potent antiplasmodial activities against Plasmodium falciparum parasites.