

Chemical Investigations of Medicinal Plants of Southern Africa

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Southern Africa is one of the rich centres of plant biodiversity in the world. Not only does it support a large number of species (*ca* 30 000 higher plants in South Africa alone), but also has many species endemic to the area. The Cape Floristic Region with over 6 000 endemic species is one of the world's richest floral regions. The great variation in climatic types from the sub-tropical eastern coast to the semi-desert vegetation of much of the region to the Mediterranean climate of the Western Cape has resulted in a wide variety of types of plants adapted to the different habitats. The indigenous peoples of Southern Africa have a long history of traditional plant usage for medicinal purposes. The trade in medicinal plants in Southern Africa is an important part of the economy with over seven hundred plant species reported as being traded in the region. Phytochemical investigations of two of the most important plant families: the Hyacinthaceae and the Amaryllidaceae will be discussed.

Investigations of members of the Hyacinthaceae family have yielded a large number of novel compounds, including homoisoflavanones, **1**, nortriterpenoids, **2**, bufadienolide glycosides, **3**, norlignans and stilbenoids. The norlignans isolated proved active in anti-inflammatory screening and the synthesis of these compounds was attempted. The attempted synthesis led to an unexpected ring closure reaction, resulting in the formation of an interesting compound with the substituted indane ring system, **4**.

