

INTRODUCTION

This book is the second in a series of publications describing and illustrating plants used medicinally in countries of the Commonwealth Caribbean. The first, entitled 'A Guide to the Medicinal Plants of Trinidad and Tobago', was published by the Commonwealth Secretariat in 1983. The methods used in compiling the data for both these volumes included interviews, plant collection and identification, literature search for chemical and pharmacological information and some basic screening carried out locally. The format and presentation are also essentially the same. The purpose is to encourage further research into the uses of these plants and, if appropriate, to stimulate product development.

The plants which are described in this book reflect to an unequal extent two aspects of plant life in Guyana. The flora of the coastal region and the banks of the great rivers is mainly associated with areas that are developed and populated; many of the species are the same as those found in the Caribbean islands. These plants have been studied more intensively and provide the bulk of the material dealt with in this publication. A much larger number of potentially important species belong to the huge reserves of forest which cover 16.29 million hectares of interior Guyana. Here we include only a few of the better known or commoner forest species. Many others form the domain of the indigenous Amerindians. These tribes still live in stable vibrant communities maintaining their traditional languages, ceremonies and culture which includes the uses of plants for medicinal and other purposes. It is hoped that studies similar to those being carried out on indigenous populations in neighbouring Suriname will, with the collaboration of the Amerindian Studies Department of the University of Guyana and the Commonwealth Science Council, be embarked on presently.

There are several earlier publications dealing with the medicinal plants of Guyana, but none have been illustrated and descriptions were often sketchy or lacking. Rodway, in 1885, dealt with plants of the coastal region and the common names he used were mainly those of anglophone origin. His work is remarkable in that most of his botanical identifications are valid today, and many of the stated medicinal uses are the same as we have found for this study. Abraham's article 'Materia Medica Guian. Britt.', published in 1912, has about 200 statements of therapeutic uses of plants mostly referred to by Amerindian names only, with very few botanical identifications. Many of the local names used in Abraham's publication are the same as or similar to those recorded here and it would be interesting to carry out a study of the consistency of their application to plants in Guyana over the intervening years.

Another significant publication is that of Fanshawe in 1950 in 'Minor Forest Products of Guyana, Part II'. This work deals with the possible multiple uses of Guyana forest plants for fibres, tannins and dyes, latex products, resins, essential oils, fatty oils and waxes, cellulose products and drug and food plants. The medicinal uses of over one hundred plants are described. These too remain for the most part to be re-investigated.

Haynes, 1969, has been an important source of information, particularly for the correlation of local and botanical names.

It is to be noted that data from previously published works have been included in this book only if the plant referred to has been clearly identified. The most important consideration in modern times is that the plants should be recognised and

that communication about them should be accurate. Illustrations, clear descriptions and correct nomenclature aim to achieve this.

Statements about distribution also indicate the kind of place where the plant is most likely to be found growing.

Under the heading Medicinal Uses, the ailments for which the plant is believed or alleged to provide a treatment or remedy are stated. If known, the part of the plant used and the methods of preparation are also given. The latter rarely specify quantities because these are not consistent or not known. The plants may be used alone or in mixture and these vary in composition from user to user according to individual preference or availability of ingredients. In no case should any statement by the present authors be regarded as a recommended prescription and, where an opinion is offered at all, it is more likely to be a warning against a toxic principle or possibly some dangerous property of which the user should be aware.

As more phytochemical research is undertaken world-wide, more substances are being found, isolated, identified and tested. The constituents have different pharmacological activities and some of them may prove after testing to be not useful or even harmful. Thus, medicinal application must respond to ever-increasing knowledge. More careful dosage or even total avoidance, in spite of symptomatic remissions, may sometimes be indicated. Where Biodynamic Notes are lacking, as they are for many species in this book, obviously further research is called for.

No attempt has been made to analyse or rationalise the pharmacology of mixtures here. One of those, most alluded to, is that which regularly contains Devil-doer (**Strychnos spp.**), Sarsparilla (**Philodendron sp.**) and other standard ingredients, which are mostly forest climbers. In various forms this recipe seems to be very popular for use as an aphrodisiac and for urinogenital complaints and venereal diseases. The properties of the constituents are dealt with individually where they arise. A naming problem exists with the anomalous use of the word Sarsparilla in Guyana. In other countries this name is consistently applied to species of **Smilax** - see p. 212.

The text of this book has entries for 173 native and naturalized Guyanese plants, as well as a few cultivated species. Of these, 148 are illustrated by line drawings, 102 of them being original by local artists and the remainder adopted from the companion volume for Trinidad and Tobago.

In compiling this study, we were ably assisted by a wide range of people such as market vendors, old villagers, porknockers and, for this, we are extremely grateful. Significant technical inputs were also forthcoming from the staff of the Herbarium at the University of Guyana, some staff members of the Department of Biology at the University and the Natural Products research group at the Institute of Applied Science and Technology in Guyana. For this we would like to express our appreciation. Finally, we would like to acknowledge the full support given by the Commonwealth Science Council to this project.

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