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Ethnobotanical Uses of Cinnamomum Species, Tamil Nadu, India

Muthiah Maridass and Bonfilius Victor

Animal Health Research Unit St. Xavier's College (Autonomous) Palayamkottai-627002, Tamil Nadu, India Email: orchideyadass@yahoo.com

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Abstract

In the present paper, six *Cinnamomum* species are described that are used as spices and medicines by the Kanis community of Karaiyar region, Kalakad Mundanthurai–Tiger Reserve Forest, South India. Medicinal uses of the native population included the treatment of wounds, fever, intestinal worms, headaches and menstrual problems.

Key words: Kanis, Ethnobotany, Karaiyar, *Cinnamomum* species, South India.

Introduction

Spices are defined by the US Food and Drug Administration as "aromatic vegetable substances, in the whole, broken, or ground form, whose significant function in food is seasoning rather than nutrition. They are true to name, and from them no portion of any volatile oil or other flavoring principle has been removed" (Lampe, 2003). By this definition, onions, garlic, and celery, even in the dried form, and seeds such as poppy and sesame seeds are typically regarded as foods, not spices. Some spices, such as paprika, turmeric, and saffron are used for both coloring and flavor and when used as ingredients in foods are designated as "spice and coloring." Most spices are derived from bark (eg, cinnamon), fruit (eg, red and black pepper), and seed (eg, nutmeg) (Lampe, 2003).

Cinnamon is one of the most popular spices used by humankind, as a glance through any cookbook will indicate. From breakfast rolls to spiced cookies, pudding and pies to quick breads and chutneys, cinnamon finds its way into recipes for standard family fare as well as special treats. Cinnamon is the second most important spice (next to black pepper) sold in U.S. and European markets. Cinnamon occupied a pre-eminent position in the ancient world and was much sought after. In the middle ages, the lure of spices tempted the Western powers to

explore the unknown seas in search of the famed spice lands of the east. These explorations eventually led to the discovery of America and the sea route to India by Portuguese explorers. With those discoveries human history witnessed the transition from the medieval to the modern era. Imperialism and colonialism reigned the world scene in the next few centuries. It was the period when the world powers fought bitter wars for naval supremacy and for monopoly in the spice trade. In this struggle, cinnamon was the Holy Grail for foreign invaders, over which many a costly war was fought by Portugal, Holland, France and Britain.

The genus *Cinnamomum* comprises several hundred species, which occur in Asia and Australia. These are evergreen trees and shrubs and most of the species are aromatic. *C. zeylanicum*, the source of cinnamon bark and leaf oils, is a tree indigenous to Sri Lanka. Many species of cinnamon yield a volatile oil on distillation. The most important cinnamon oils in world trade are those from *C. zeylanicum*, *C. cassia* and *C. camphora*. The other species provide oils, which are utilized as sources for chemical isolates. However, a number of other cinnamon species are distilled on a much smaller scale and the oils used either locally or exported (The Wealth of India, 1992).

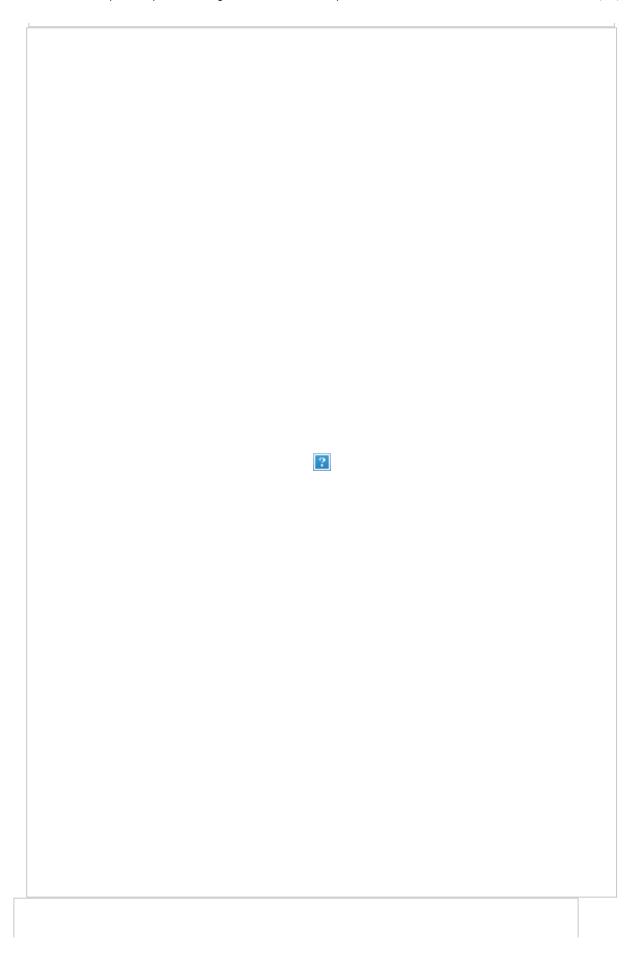
Methodology

The Kanis live in the forests of the Thiruvananthapuram district of Kerala in South India. Their current population is estimated to be approximately 18,000. Their settlement system is such that a few families live in a cluster interspersed with the forest. Several Kanis families migrated from the Karaiyar region, Tamil nadu. We have visited the area of Karaiyar region, Southern Western Ghats region, Tirunelveli District, Tamil Nadu. *Cinnamomum* species, namely: *C. sulphuratum*, *C. walaiwarense*, *C. travancoricum*, *C. malabatrum*, *C. filipedicellatum* and *C. wightii* were collected and identified (Plates 1 and 2).

Results and Discussion

All the *Cinnamomum* species have multiple uses, and especially for the treatment of diseases. The treatment of five types of diseases by *Cinnamomum* species is reported in this paper. Stomach pain, for example, was reported to be alleviated by *C. walaiwarense*, *C. trivancoricum* and *C. malabatrum*. Similarly, a single plant each of *C. riparium*, *C. sulphuratum*, *C. filipedicellatum* and *C. wightii* was used for treating wounds, fever, intestinal worms, headaches and menstrual problems (Plate 3). Essential oils from *Cinnamomum* species were isolated and screened for antimicrobial and anti-inflammatory activities in our laboratory. Future studies will focus on other types of bioassays, as this process is usually considered as the first step in the discovery of new drugs.





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