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Journal of Ethnopharmacology 79 (2002) 109–112

Journal of
ETHNO-
PHARMACOLOGY

www.elsevier.com/locate/jethpharm

Some herbal remedies from Manzini region of Swaziland

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Received 29 June 2001; received in revised form 27 September 2001; accepted 18 October 2001

Abstract

In this paper, recipes for 41 herbal remedies used for treating 25 illnesses in traditional medicine in Swaziland are reported. Preparation of the herbal remedies involved the use of different parts of 47 species from 32 families, some of which have never been described previously in the flora of Swaziland. Descriptions of the plants used, the preparation of each remedy, dosage, route of administration and medical uses are reported. Some of the diseases the remedies are used to treat include asthma, backache, candidiasis, cardiac problems, cough, diarrhoea, dizziness, eye problems, constipation, menorrhagia, painful shoulders, scabies, threatened abortion, toothache, ulcers and vomiting among others. The remedies were obtained from traditional medical practitioners (TMPs) in an ethnomedical survey carried out in the Manzini region of Swaziland. Voucher samples of the plants used for the remedies were collected, identified and deposited in the National Herbarium of Swaziland. © 2002 Elsevier Science Ireland Ltd. All rights reserved.

Keywords: Herbal remedies; Manzini region; Swaziland

1. Introduction

Plants form an important part of Swaziland's biological resources. Many of the plants are used in traditional medicine. Many Swazis rely on traditional medicine for their health care needs, including some who attend modern health institutions, because, traditional medicine is anchored in the culture and religious beliefs of the people. The reliance on herbal medicine continues to rise as the costs of conventional drugs increase and are becoming unaffordable by many in rural communities.

The need to preserve the cultural heritage by documenting information on medicinal plants used in traditional medicine has led to ethnomedical surveys of Swaziland (Amusan et al., 2000; Adeniji et al., 2001). In continuation of our efforts to document uses of medicinal plants in Swaziland, this paper reports some new herbal remedies.

2. Methodology

An ethnomedical survey of the Manzini region of Swaziland was carried out from June 1998 to March 2000. The Manzini region of Swaziland (4068 km²) is located between 26°15'–26°30'S latitude and 30°45'–31°30'E longitude. Traditional medical practitioners (TMPs) in the region were interviewed and remedies used for treating diseases were recorded. Details about the period for collecting the plant material, its shelf-life, the recipe for each remedy as well as any ritual involved were recorded. The dosage, route of administration, contra indications, side effects and the criteria used to recognise a cure were given by the TMPs.

A voucher sample of each plant mentioned by the TPMs was collected immediately after each interview with the assistance of the TMP who gave the plant. The plants were authenticated by G.M. Dlamini, the Curator of the National Herbarium, Malkerns and the plant vouchers were deposited in the herbarium.

3. Results

Plants used in the preparations given by the TMPs are presented in Table 1. They are listed in alphabetical

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Table 1
Plants used in the preparation of herbal remedies

Scientific name	Family	SiSwati name	Voucher number	Recipe	Use
<i>Aloe arborescens</i> Mill and <i>Aloe saponaria</i> Haw	Asphodelaceae Asphodelaceae	<i>Inhlaba</i> <i>Lihala</i>	M310 M311	Grind together 50 g each of the leaves of <i>M310</i> and roots of <i>M311</i> , add the mixture to 2 l water and boil for 10 min	Take 1 tablespoon of the concoction thrice daily for 7 days for cardiac problems
<i>Berkweya setifera</i> DC.	Asteraceae	<i>Lulwini/Iwenkhomo</i>	M375	Cut 50 g each of the leaves and roots to pieces and add both to a cup of warm water	Rinse teeth with the infusion twice daily for 3 days for toothache
<i>Bolusanthus speciosus</i> (Bol.) Harms.	Papilionaceae	<i>Umhhohlo</i>	M307	Grind 50 g roots and add to 1 l warm water	Take 1 tablespoon of the concoction thrice daily for 7 days for abdominal pains
<i>Bowiea volubilis</i> Harv. Ex Hook. F. and <i>Boophane disticha</i> (L.f.) Herb.	Hyacinthaceae Amaryllidaceae	<i>Gibizisila</i> <i>Siphaluka</i>	M344 M345	Cut 50 g bulb of each plant to pieces, add to 5 l water and boil for 5 min	Take a cup of the concoction once a day for 5 days for scabies
<i>Carissa bispinosa</i> (L.) Desf. Ex Brenan	Apocynaceae	<i>Umvusankunzi</i>	M306	Grind 30 g roots and add to 1 l warm water	Take 1 teaspoon of the concoction daily for 7 days for impotence
<i>Cheilanthes calomendos</i> Swartz	Adiantaceae	<i>Mphasetje</i>	M284	Grind 30 g leaves or roots to powder and add to a hot plate. Add another 30 g of the powder to 1 l water and boil for 5 min	For treatment of epilepsy, inhale the smoke, take 1 tablespoon of the concoction thrice daily for 3 days and do enema only once
<i>Combretum molle</i> R. Br. Ex G. Don and <i>Lippia javanica</i> Spreng.	Combretaceae Verbenaceae	<i>Imbhondvo/Lemhlopho</i> <i>Umsutane</i>	M369 M370	Grind together 30 g each of the bark of <i>M369</i> , leaves and stem of <i>M370</i> , add to 5 l water and boil for 5 min	Take 1 tablespoon of the decoction thrice daily for 5 days for asthma
<i>Cussonia natalense</i> Sond.	Araliaceae	<i>Umsenge</i>	M281	Grind 50 g bark and add to 5 l warm water	Drink the concoction to induce vomiting and stop stomachache. There is always nausea, so take light porridge
<i>Dichrostachys cinerea</i> (L.) Wight & Arn.	Mimosaceae	<i>Umzilazembe</i>	M269	Grind 30 g roots, add the powder to a hot plate and inhale the smoke. Add another 30 g powder to 1 l water and boil for 5 min	Take 1 tablespoon of the concoction twice daily until cough stops
<i>Dicoma anomala</i> Sond.	Asteraceae	<i>Ndwedweni</i>	M056	Grind 50 g bulb to paste, add to 1 l water and boil for 30 min	Take 1 tablespoon of the concoction three times daily for kidney problems
<i>Erianthemum dregei</i> (Eckl. & Zeyh.) V. Tieghem	Loranthaceae	<i>Liphakama</i>	M225	Leaves are used as catalyst for other medicines	Add a little of powdered leaves to the other medicine
<i>Euclea divinorum</i> Hiern	Ebenaceae	<i>Umdlelanyamatane</i>	M305	Grind 50 g roots and add to 1 l warm water	Take 1 tablespoon of the concoction thrice daily for 3 days for ulcers
<i>Gardenia cornuta</i> Hemsl.	Rubiaceae	<i>Umvalansangweni</i>	M219	Grind 30 g roots and add to 5 l water	Drink the mixture when necessary as a laxative
<i>Gardenia spatulifolia</i> Stapf & Hutch	Rubiaceae	<i>Umvalansangweni</i>	M292	Grind 50 g roots and add to 5 l warm water	Drink the concoction to induce vomiting once a day for 3 days for stomach trouble
<i>Indigofera sanguinea</i> N. E. Br.	Papilionaceae	<i>Cubhujeje</i>	M196	Grind together 50 g each of leaves and roots, and add to 250 ml water	Drink a cup of mixture only once to treat threatened abortion
<i>Lannea edulis</i> (Sond.) Engl.	Anacardiaceae	<i>Umfokolovu</i>	M244	Grind 30 g bark of root, add to 1 l water and boil for 3 min	Take 1 tablespoon of the concoction thrice daily for constipation
<i>Lasiosiphon kraussianus</i> Hutch. & Dalz.	Thymelaeaceae	<i>Umsilawengwe</i>	M132	Grind 50 g roots, add to a cup of milk and sieve	Do an enema once a week for abdominal problems in babies
<i>Lippia javanica</i> (Burm. F.) Spreng.	Verbenaceae	<i>Umsutane</i>	M132	Grind 50 g fresh root, add to 2 l water and boil slowly for 3 h	Drink a cup of mixture once daily for 3 days for kidney problems
<i>Lonchocarpus capassa</i> Rolfe	Papilionaceae	<i>Sihomuhomu</i>	M217	Grind 50 g bark and add to 5 l warm water	Drink the concoction when necessary for hallucination
<i>Mimusops zeyheri</i> Sond.	Sapotaceae	<i>Umkhamamasi/Umphushane</i>	M206 and M367	Grind 50 g roots and add to 5 l warm water	Drink the mixture when necessary to treat candidiasis
				Grind 50 g bark, add to 1 l water and boil for 10 min	Take 1 tablespoon of concoction of the bark thrice daily for 3 days for ulcers and wounds.

Table 1 (Continued)

Scientific name	Family	SiSwati name	Voucher number	Recipe	Use
<i>Myrothamnus flabellifolius</i> Welw.	Myrothamnaceae	<i>Vuka</i>	M343	Grind 30 g leaves and add a pinch of it to any medicine to make the medicine more effective	Leaves are used as catalyst for other medicines
<i>Olea capensis</i> L.	Oleaceae	<i>Sephulo/Ummcuma</i>	M322	Grind 50 g bark and add to 1 l warm water	Take 1 tablespoon of the concoction thrice daily for 5 days as treatment for peptic ulcers
Ozoroa sphaerocarpa R. & A. Fernands and <i>Athrixia phylloides</i> DC.	Anacardiaceae Asteraceae	<i>Imfuce</i> <i>Liphephetse</i>	M357 M358	Grind together 50 g each of the barks of M357 and M358, and add to 5 l water	Use the mixture to wash wounds twice daily for 5 days
<i>Peltophorum africanum</i> Sond.	Caesalpinaceae	<i>Sikhabamkhombo</i>	M293	Grind together 30 g each of the roots and bark, and add to 1 l warm water Grind 50 g bark, add to 1 l water and boil for 5 min	Take 1 tablespoon of the concoction twice daily for 2 days for stomach cramps Drink a cup of concoction of the bark thrice daily until menorrhagia is cured
<i>Pentanisia prunelloides</i> (Klotzsch ex Eckl. & Zeyh.) Walp.	Rubiaceae	<i>Licishamlilo</i>	M235	Grind 50 g bulb, add to 1 l water and boil for 3 min	Drink the concoction thrice daily until general body ache goes
<i>Pittosporum viridiflorum</i> Sims	Crassulaceae	<i>Mfusamvu</i>	M243	Grind 30 g bark to powder	Add the powder to aching tooth twice daily until the pain is gone
<i>Psidium guajava</i> L. and <i>Albizia adianthifolia</i> (Schumach.) W.F. Wight	Myrtaceae Mimosaceae	<i>Umgwava</i> <i>Sivangatane</i>	M365 M366	Cut 50 g leaves of M365 and 50 g roots of M366 to pieces, add to 1 l water and boil for 5 min	Take 1 tablespoon of the infusion thrice daily for 3 days for diarrhoea
<i>Rapanea melanophloeos</i> (L.) Mez and <i>Pterocelastrus echinatus</i> N. E. Br.	Myrsinaceae Celastraceae	<i>Maphipha/Gcolokhulu</i> <i>Macundza</i>	M228 M229	Grind together 50 g each of the barks of M228, M229 and add to 1 l warm water	Take 1 tablespoon of mixture 3 times a day until general body ache goes. Do not take sugar or maize porridge while on medication
<i>Rubia cordifolia</i> L.	Rubiaceae	<i>Intilalubombo</i>	M256	Grind 30 g of bark or root to powder, add to a hot plate and add cold water	Lick the mixture twice daily for 5 days for uterine problems.
<i>Schotia brachypetala</i> Sond. And <i>Sclerocarya birrea</i> (A. Rich.) Hochst	Caesalpinaceae Anacardiaceae	<i>Ugcamu/Vovovo</i> <i>Unganu</i>	M211 M212	Grind together 50 g each of the barks of M211 and M212, and add to 5 l warm water	Drink one cup of the concoction to induce vomiting and boil another 5 l mixture for steaming when necessary to treat painful shoulders
<i>Scilla nervosa</i> (Burch.) Jessop and <i>Crossandra fruticulosa</i> Lindau	Hyacinthaceae	<i>Imbita yebantfwana</i>	M318	Cut 30 g each of the bulbs of M318 and roots of M319 to small pieces, add to 1 l water and boil for 10 min	Drink one half of a cup of the concoction thrice daily for 5 days for peptic ulcers in children
<i>Spirostachys africana</i> Sond.	Acanthaceae Euphorbiaceae	<i>Likhambilebantfwana</i> <i>Umtfolo wesintfu</i>	M319 M078	Grind 50 g bark and add to 5 l warm water	Drink the concoction twice daily for 3 days for constipation
<i>Spirostachys africana</i> Sond. and <i>Trichilia emetica</i> Vahl	Euphorbiaceae Meliaceae	<i>Umtfolo wesintfu</i> <i>Umkhuhlu</i>	M312 M313	Grind together 50 g each of the barks of M312 and M313. Add to 5 l water and boil for 10 min	Do an enema with the concoction once a day for constipation
<i>Stylochiton natalense</i> Schott	Araceae	<i>Umfanakamacetjane</i>	M360	Grind 30 g roots and add to 1 l warm water	Take 1 tablespoon of mixture twice daily for 3 days as treatment for headache
<i>Syzygium guineense</i> (Willd.) DC.	Myrtaceae	<i>Umcozi</i>	M216	Grind 30 g bark and add to 1 l water	Give 1 tablespoon of concoction to an adult and 1 teaspoon to a child three times daily until diarrhoea stops
<i>Trichilia emetica</i> Vahl	Meliaceae	<i>Umkhuhlu</i>	M203	Grind 30 g bark, add to 1 l water and boil for 1 h	Do an enema only once for backache
<i>Ximenia americana</i> L.	Olacaceae	<i>Umtfundvuluka</i>	M204	Grind 30 g roots, add to 1 l warm water and sieve Grind together 50 g each of the bark and roots to powder and add to 1L warm water	Add a drop of the mixture daily to the eye with problems Take 1 tablespoon of concoction thrice daily until the medicine is finished for threatened abortion
<i>Zanthoxylum capense</i> (Thunb.) Harv.	Rutaceae	<i>Umnungwane</i>	M291	Burn 50 g whole plant in a hot plate	Inhale the smoke daily for 2 days for dizziness

order of their scientific names in italic, followed by the families, the siSwati names in italic, voucher number, recipe for each remedy and therapeutic uses.

4. Discussion and conclusions

Herbal remedies abound in traditional medicine in Swaziland for symptomatic treatment of various diseases. It is noteworthy that the TMPs in the Manzini region alone had remedies for such a wide range of diseases. Forty one remedies were described for 25 illnesses. The remedies have never been reported in any pharmacopoeia and ethnobotanical studies of Swaziland (Amusan et al., 2000; Adeniji et al., 2001). Preparation of the herbal remedies involved the use of different parts of 47 species from 32 families. Some of the plants have never been described in the flora of Swaziland (Compton, 1976; Dlamini, 1981). *Mimusops zeyheri* Sond. (Sapotaceae) was given two codes, M206 and M367, because, two remedies in which the plant was used were given by two TMPs, therefore, the plant specimen was collected twice with the two codes. The remedies described were acclaimed to be efficacious and have been used for decades. Some of these preparations can be very useful in the primary health care. An integrated health care system where resources of the traditional and orthodox medical systems are combined, as is being practised in *Clinique de Manongarivo* in Madagascar, would be ideal especially for developing countries endowed with rich plant genetic resources (Quansah, 1999).

Traditional medicine in Swaziland is clouded with a lot of secrecy, myths and metaphysical powers. The TMPs have strong belief in ancestral spirits. Their diagnosis and the effectiveness of their prescriptions are usually bound up with elements of ancestral belief. Some of the concepts in the Swazi traditional medicine are, therefore, difficult to explain in scientific terms. They can only be understood when considered within the culture of the people (Makhubu, 1978). The activities reported cannot be explained in terms of known activities of the families of the plants. Scientific research

on the medicinal plants should explode the myths by identifying the active principles in the plants. Scientific examination of the remedies could lead to standardisation and quality control of the products to ensure their safety. It is after such evaluations that they can be approved for use in the primary health care. Such research activities could also lead to the development of new drugs as in the past (Farnsworth et al., 1985; Farnsworth, 1988).

Acknowledgements

We thank the TMPs who were involved in the survey and G. M. Dlamini who identified the plants. We are also grateful to the University of Swaziland Research Board for funding.

References

- Adeniji, K.O., Amusan, O.O.G., Dlamini, P.S., Enow- Orock, E.G., Gamedze, S.T., Gbile, Z.O., Langa, A.D., Makhubu, L.P., Mahunnah, R.L.A., Mshana, R.N., Sofowora, A., Vilane, M.J., 2001. Traditional Medicine and Pharmacopoeia Contribution to Ethnobotanical and Floristic Studies in Swaziland. OAU/STRC, Lagos.
- Amusan, O.O.G., Dlamini, P., Msonthi, J.D., Makhubu, L.P., Dlamini, B.B., 2000. Some medicinal plants used in traditional medicine in Swaziland. UNISWA Journal of Agriculture, Science and Technology 4 (1), 20–26.
- Compton, R.N., 1976. The flora of Swaziland. Journal of South African Botany Supplement 2
- Dlamini, B., 1981 Swaziland flora. Ministry of Agriculture and Cooperatives, Mbabane.
- Farnsworth, N.R., 1988. Screening plants for new medicines. In: Wilson, E.O. (Ed.), Biodiversity. National Academy Press, Washington, pp. 83–97.
- Farnsworth, N.R., Akerele, O., Bingel, A.S., 1985. Medicinal plants in therapy. Bulletin of World Health Organization 63, 965–981.
- Makhubu, L.P., 1978. The Traditional Healer. The University of Botswana and Swaziland, Kwaluseni.
- Quansah, N., 1999. Integrated health care system: meeting Africa's health needs in the 21st century. In: Mshana, R.N., Ndoye, M. (Eds.), African Traditional Medicine and Medicinal Plants. Proceedings of the 6th Inter-African Symposium on African Traditional Medicine and Medicinal Plants. OAU/STRC, Lagos, pp. 10–17.