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Ethnobotanical plant uses in the KwaNibela Peninsula, St Lucia, South Africa

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Abstract

Ethnobotanical field studies were conducted for the first time in the KwaNibela Peninsula of southern Maputaland, KwaZulu-Natal, to document indigenous knowledge about useful plants. The vernacular names and uses of 82 plant species were recorded and compared to published Zulu and Swazi knowledge. Medicines for skin disorders, toothache, wounds, worms, chest and throat ailments, infertility and purgatives are still commonly used. Superstition and divination play a major role in the traditional knowledge system of the people of KwaNibela with 24 plants used for this purpose. Three KwaNibela medicinal plants (*Erythroxylum delagoense*, *Putterlickia verrucosa*, and *Teclea natalensis*) appear to be new records, not previously reported in the general scientific literature. The list also includes 61 novel uses of plants and another 15 new variations on known (published) uses. Ten previously unpublished vernacular names are presented, together with an additional 19 new variants of known names. These new additions to the scientific literature confirm that indigenous knowledge in KwaZulu-Natal is not yet completely recorded.

Keywords: Indigenous knowledge; KwaZulu-Natal; Maputaland; Medicinal plants; Zulu culture

1. Introduction

South Africa is a developing country with a large rural population that relies on natural resources for various purposes such as building, craftwork, foods, cosmetics and medicines. The diversity of ethnic groups in South Africa has given rise to a melting pot of traditional indigenous knowledge, from the boererade of the Afrikaans community and the traditional knowledge of the Khoikhoi and San tribes in the Karoo region (Van Wyk et al., 2008), to the traditional knowledge of the Zulu, Xhosa, Basotho and Venda peoples, across the extent of the country.

The KwaZulu-Natal Province is the strong-hold of the isiZulu-speaking ethnic group and, apart from being home to a rich cultural society; KwaZulu-Natal has a wealth of biological diversity with many different and unique biomes. Bantu-speaking tribes were the forerunners of the Nguni cultural groups (Zulu, Xhosa, Swati and Ndebele) and they migrated south into the eastern regions of South Africa from central Africa as early as the eleventh century (Bruton and Cooper, 1980). In 2001, there were 10,677,006 isiZulu-speaking people in South Africa, of which 71% resided in KwaZulu-Natal (StatsSA, 2001). Zulu plant names and their uses have been extensively documented as many rural communities rely heavily on their environment for traditional medicines, food and building materials. Bryant (1966) provided a detailed commentary and account of the ethnobotany and the medicine men of the Zulu tribe. He found that the indigenous knowledge system worked on the premise that the symptom was the ailment and therefore, the symptoms were treated and not necessarily the root cause of the symptoms. The Zulu medicine men had limited knowledge of the anatomy and physiology of the human body. Many of the traditional treatments involved some form of divination and superstitious practices (Kaigh, 1947). The differences between Zulu and Western orthodox medicines are thought to be as result of the differences in the understanding of disease and illness and this is evident in the way in which treatments are administered and superstition is incorporated. Practioners of Zulu plant use range from the layperson to the herbalists, diviners and traditional doctors and

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knowledge is transferred from generation to generation orally (De Wet et al., 2010; Hutchings, 1989).

The KwaNibela Peninsula extends into the northern reaches of Lake St Lucia at the southern extent of Maputaland in northeastern part of KwaZulu-Natal, South Africa (Fig. 1). It is located at 27°56′10.9″S and 32° 26′35.9″E and covers an area of approximately 3690 ha. It borders on the iSimangaliso World Heritage site, which is an area of great biodiversity value and is included in the Maputaland–Pondoland–Albany Biodiversity Hotspot. The area of KwaNibela does not have any formal conservation status and is covered by coastal forest patches interspersed with Maputaland Coastal Belt vegetation (Mucina and Rutherford, 2006).

The peninsula is home to a rural Zulu-speaking community of approximately 4245 people (StatsSA, 2001), unevenly distributed throughout the peninsula in family homesteads and concentrated largely in the northern half of the peninsula. Maize (*Zea mays*) and papaya (*Carica papaya*) are the main subsistence crops cultivated and there is a local market at the north of the peninsula. The community is governed by tribal authority and an *induna* (chief) and there are several *izangoma* (diviners / traditional healers) that provide traditional medicines and advice to the community using plant and animal species from the forest. The community members also harvest plant species for food (*Canthium* species, *Grewia caffra*, *Lagynias lasiantha*), medicine (*Azima tetracantha*, *Combretum molle*, *Syzygium cordatum*) and building materials (*Spirostachys africana*, *Toddaliopsis bremekampii*). According to the *induna*, Lazarus Mdluli, the present-day KwaNibela people migrated from Swaziland and settled in the peninsula in 1865. This may have had an influence on the local dialect (which is not particularly discernable) and the local traditional knowledge related to plant species. KwaNibela is relatively isolated and certain plant uses may be unique to the peninsula.

The aim of the study was to compare the traditional uses and vernacular names of the most commonly used species in

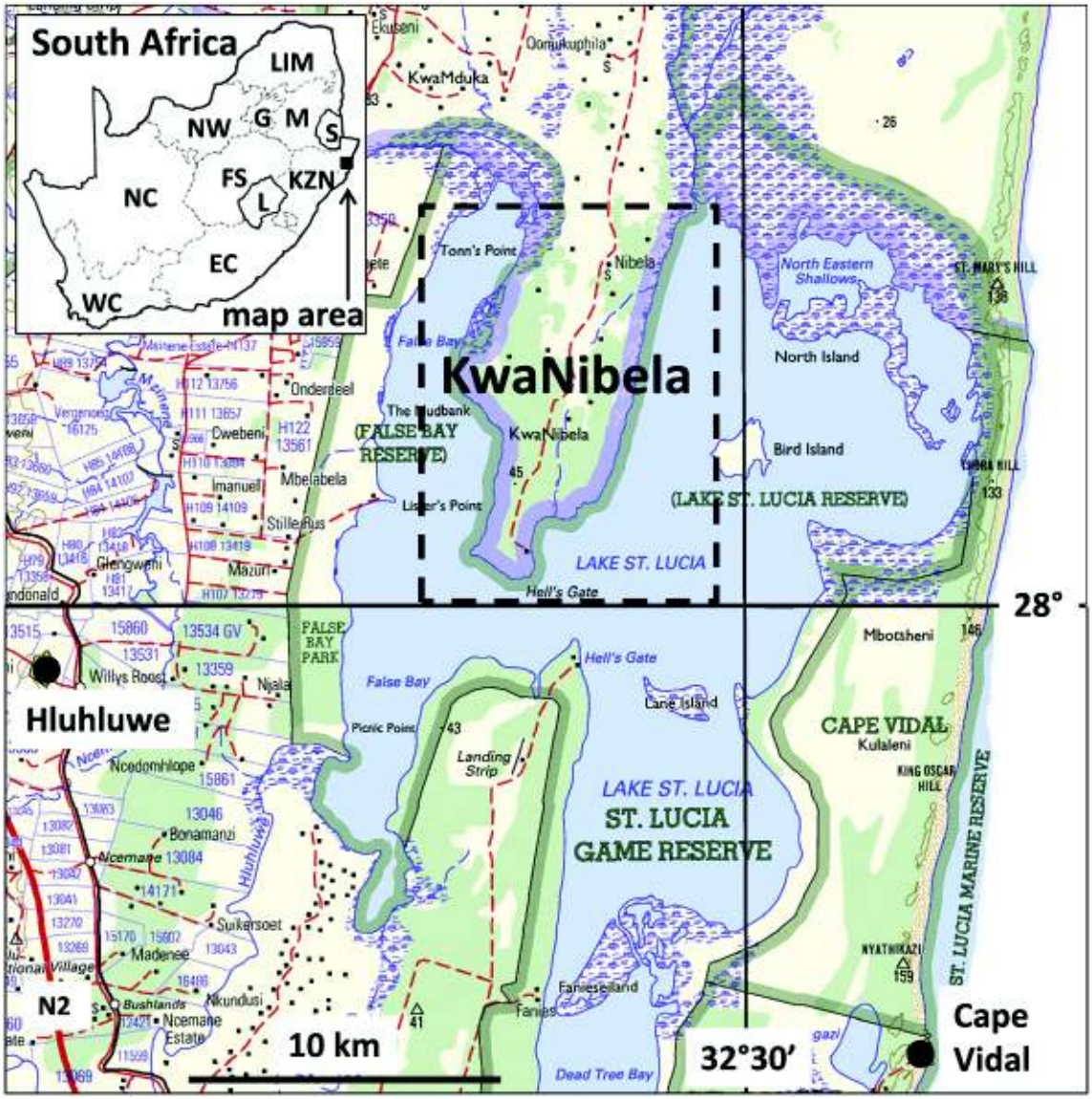

Fig. 1. Map of the northern part of Lake St Lucia, northeastern KwaZulu-Natal, South Africa, showing the study area (the KwaNibela Peninsula).

KwaNibela with mainstream recorded Zulu uses. While Zulu indigenous knowledge is relatively well recorded (Bryant, 1966; Cunningham, 1988; Gerstner, 1938, 1939, 1941; Hutchings et al., 1996; Hutchings, 1989; Pooley, 1993; Watt and Breyer-Brandwijk, 1962), different areas and different communities may have local variations of the same knowledge system or completely new uses for certain plant species. Documentation of plant use is, therefore, imperative in an area such as this, which has not been studied previously and is at risk of erosion of the indigenous knowledge as rural–urban migration becomes more common. While many young people are settling in KwaNibela, there are growing numbers of the youth leaving the peninsula to seek work in the cities and the ability and, in some cases, interest to learn the traditional knowledge system is lost.

2. Methodology

The survey was conducted in the KwaNibela Peninsula from June 2007 to April 2009. A considerable length of time was needed to become acquainted with a few of the community members, gaining their trust and, finally, enlisting the assistance of five persons as traditional knowledge experts, informants and translators. The first three informants all gained their general knowledge from own experience: Themba Nxumalo (TN), a KwaNibela resident, Stembiso Mdluli (SM) and Goodenough ("Sgwili") Mdluli (GM), both sons of the *Induna*. Sibusiso Falakhe (SF) is a young *sangoma* who obtained his knowledge from his mother and grandfather, both of whom were *izangoma*. Mr. Gumede (G) is an elderly *sangoma*. Translators were used to communicate with the experts, who were not familiar with the English language. Interviews were conducted and the rapid appraisal approach (Martin, 1995) was used to record the uses of plant species. This approach is a bridge between formal surveys and more unstructured methods, such as field observation and interviews and it allows for community participation in a more informal setting. This is often considered more effective in ethnobotanical surveys.

A list of ethnobotanically important KwaZulu-Natal plant species, together with common species in KwaNibela and Maputaland endemic species, was compiled and used during the interview process. Verification of the information was done by indicating the known Zulu name to the expert and asking him to point out the correct plant species from a number of photographs of similar species. Rapid appraisal was used during walks through the forest where the expert/informant was asked to point out important species and indicate the uses thereof. Voucher specimens were collected and are housed at University of Johannesburg Herbarium (JRAU).

Vernacular names and the local uses of 82 plant species were recorded (Table 1). The KwaNibela names and uses were compared to known Zulu and Swazi names and uses by consulting a variety of ethnobotanical sources (including Arnold et al., 2002). A complete comparison between KwaNibela uses and other known uses has been compiled and is available from the authors on request (Corrigan, 2009). The plant species are listed alphabetically in Table 1 by their scientific name, together with family name and local name (in Zulu). Authorities for scientific names are given in Table 1 and are not repeated elsewhere in the text. All the known Zulu names, as listed by RF Raymond in "A glossary of Zulu plant names" (privately published in 2005) and Hutchings et al. (1996), are provided as a basis with which to determine deviations from mainstream Zulu names. Swazi names, as listed in Adeniji et al. (1998) and Dlamini (1981) are also given in order to identify any possible influences, which may corroborate the verbal reports of the KwaNibela people having migrated from Swaziland during the 1860s. The anecdotes or uses, as given by the indicated informants/experts, are recorded exactly as they were described in order to best preserve the accuracy of the information. Personal commentary is indicated in parenthesis. Partially new records are indicated by the superscript [b] and entirely new records are indicated by [a].

3. Results and discussion

Traditional uses of 82 species of plants in KwaNibela are presented in Table 1, together with vernacular names and literature references where uses have been recorded in the scientific literature.

New names records are presented in Table 1 for 10 species: *Azima tetracantha*, *Balanites maughamii*, *Canthium ciliatum*, *Canthium spinosum*, *Carissa tetramera*, *Diospyros villosa*, *Erythroxylum delagoense*, *Euclea divinorum*, *Grewia microthyrsa* and *Hibiscus cannabinus*. Another 19 of the vernacular names encountered in KwaNibela differ slightly from the recorded Zulu names.

Three of the species (*E. delagoense*, *Putterlickia verrucosa* and *Teclea natalensis*) are used regularly in KwaNibela but, to our knowledge, have not been recorded in the general scientific literature, prior to this study (Corrigan, 2009). The fruits of *E. delagoense* are an important local medicine for throat and respiratory ailments in infants. The local cleaning ritual of sangomas involving *P. verrucosa* roots was not known before. It may be valuable to further explore the use of *T. natalensis* fruits and their possible role in dental care.

Interesting new Zulu traditional use records for 45 well-known species, as well as 16 poorly documented species, are presented in Table 1. The local uses for these 61 species appear to have remained unpublished, as similar Zulu uses could not be found in the literature. In addition, there are 15 partially new use records (i.e., variations on previously recorded uses) for some well-documented species, indicated in Table 1.

The majority of remedies recorded in KwaNibela are associated with magical purposes (24 species), such as good luck charms or warding off evil spirits. Other main categories and the number of species recorded for each are hunting (2), food/drink (22), repellent (insect/snake) (2), timber (building) (2), firewood (2), general tonic (1), infertility (4), skin disorders/treatment (3), pain/anxiety/inflammation (3), wound healing (6), respiratory conditions (8), dental ailments (8), gastro-intestinal disorders (4), parasitic infection (3), ear/nose/throat ailments (2) and neurological disorders (1). A number of the remedies were

Table 1
List of anecdotes on traditional names and plant uses in the KwaNibela Peninsula, St Lucia. Partially new records of vernacular names and plant uses are indicated by the superscript [a] and entirely new records are indicated by [b].

Species name; family name; vernacular name(s); voucher specimens [BMC] and photographs [DSC]	Known Zulu name(s) [where applicable, Swazi name(s) are indicated by (S)](Raymond, 2005=R, Hutchings et al., 1996=H, Adeniji et al., 1998=A; Dlamini, 1981=D)	Anecdote or use(s) recorded in Kwanibela	Known Zulu (and Swazi) uses (cited directly from source)
1. *Acacia karroo* Hayne (Fabaceae); *umuNga; isiNga;* [BMC125]; [DSC05]	*umuNga* RH; *uFaba* R; *uGagu* R; *isiKhombe* RH; *isinga* D (S)	SF: The "skin of the root" (root bark) is ground, infused in water, and sprinkled on the garden to repel snakes.[b]	Used for medicinal and magical purposes and has toxic characteristics (Hutchings et al., 1996; Pooley, 1993). The bark is used for many ailments, such as cattle poisoning and stomach ache. It is taken for sorcery-induced ailments (Watt and Breyer-Brandwijk, 1962) and used as an astringent medicine (Gerstner, 1941). The roots are used for colicky babies (Watt and Breyer-Brandwijk, 1962) and general body pains, dizziness, convulsions, venereal diseases, as an aphrodisiac, and to kill parasites in fowl runs or the house (Gelfand et al., 1985). No similar Zulu uses could be found in the literature. In Swaziland, the gum is used for mouth ulcers and throat thrush and is reputed to delay puberty. Bark and leaves are for diarrhea and dysentery (Dlamini, 1981).
2. *Acacia robusta* Burch. subsp. *clavigera* (E. Mey.) Brenan (Fabaceae); *umNgamazi;* [DSC07]	*umNgamanzi* RH; *umnqawe* H; *umgamazi* D (S); *umngamazi* D (S)	SF: The wood can be used for *braai*-wood.	Used medicinally (Hutchings et al., 1996) and for magical purposes (Pooley, 1993). The bark is used to dispatch snakes (Palmer and Pitman, 1972a). The steam is inhaled for chest complaints, and it can be applied for skin ailments. Roots are poisonous (Pooley, 1993). Used for firewood in Swaziland (Dlamini, 1981).
3. *Acacia xanthophloea* Benth. (Fabaceae); *umHlosinga; umKhanyagule*[a]; [DSC105]	*umHlosinga* RD; *umkhanyagude* H; *isiBhahaha* R; *umDlovune* R; *umHlofunga* RD; *umKhambathi* R; *umKhanyakude* R; *umkhanyakudze* D (S)	SF: A piece of the bark is ground, infused in water, and the whole body is bathed in the water to ensure that people do not think of you as a bad person (i.e., thief).[a]	Used for medicinal and magical purposes (Cunningham, 1988; Dlamini, 1981; Hutchings et al., 1996; Pooley, 1993). The bark is used as a good luck charm (Cunningham 2166 NU).
4. *Adenia gummifera* (Harv.) Harms (Passifloraceae); *umPhindamshaya;* [BMC215]; [DSC09]	*umPhindamshaya* RH; *imFule* R; *imFulwa* RH; *imPinda* RH; *phindumshaye* D (S)	SF: Outside of the home, the stem is boiled in water, and the body is steamed and bathed in same water for revenge on enemies.[a]	The root is used to make tonic, taken as a stimulant for seediness or depression, caused by febrile conditions known as "*umkhuhlane*" (cold/fever/influenza) (Bryant, 1966). The plant is used as a protective charm (Gerstner, 1938).
5. *Afzelia quanzensis* Welw. (Fabaceae); *umDlavuza;* [DSC102]	*umDlavuza* RH; *umHlakuva* RH; *umHlavuthwa* R; *inKehli* RH; *inKele* R; *inKhehli* R; *Mkolikoli* A(S); *Umbola* A(S)	SF: The seeds are kept in the wallet for luck with money.[a]	Used for medicinal and magical purposes and has toxic characteristics (Cunningham, 1988; Dlamini, 1981; Hutchings et al., 1996; Pooley, 1993). The bark is rubbed on eczema spots after python fat has been applied (Palmer and Pitman, 1972a). The plant is used to treat sores in Swaziland (Adeniji et al., 1998) and is thought to have magical properties to ward off attacks. Washing in an infusion of bark and roots brings good luck to huntsman (Dlamini, 1981).
6. *Albizia adianthifolia* (Schumach.) W. Wight (Fabaceae); *iGowane;* [BMC208]	*iGowane* RH; *umBhelebhele* RH; *umBhelele* R; *umDlandlothi* R; *umGadawenkawu* R; *umHlanhlothi* R; *uNdlandothi* R; *umNebelede* RH; *uSolo* RHD(S); *Umkhabamkhombe* AD(S)	SF: The leaves[b] are boiled in water and the body is covered over the steam to cure "chicken pox".	Used for medicinal and magical purposes and has toxic characteristics (Cunningham, 1988; Hutchings et al., 1996; Pooley, 1993; Walker, 1996). The bark and roots are used for eczema and other itchy skin complaints (Bryant, 1966). They are also used to make love-charm emetics and enemas administered to pregnant women to clear their urine (Watt and Breyer-Brandwijk, 1962; Pujol, 1990). Taken as snuff for headaches. In Swaziland, the bark and roots are used for skin diseases, scabies, and uterine problems. Leafy twigs are used to treat abscesses (Dlamini, 1981). Stembark is used for epilepsy, gonorrhoea, and eyesight. (Adeniji et al., 1998; Van Puyvelde et al., 1983).

(continued on next page)

Table 1 (*continued*)

Species name; family name; vernacular name(s); voucher specimens [BMC] and photographs [DSC]	Known Zulu name(s) [where applicable, Swazi name(s) are indicated by (S)](Raymond, 2005=R, Hutchings et al., 1996=H, Adeniji et al., 1998=A; Dlamini, 1981=D)	Anecdote or use(s) recorded in Kwanibela	Known Zulu (and Swazi) uses (cited directly from source)
7. *Albizia versicolor* Welw. ex Oliv. (Fabaceae); *umPheso*[a]; [BMC46]	*umPhisu* R; *umBhangazi* R *umKhaya-omnyamana* R; *umVangazi* R; *Sivangadana* AD *(S); Halibhoma* AD *(S); Inhlaba* AD*(S)*	SF: To draw out bad luck, the bark is boiled in water and the body is bathed in the water and then the water is thrown out into the river.[a]	Used for medicinal and magical purposes and has toxic characteristics (Cunningham and Zondi, 1991; Dlamini, 1981; Hutchings et al., 1996; Liengme, 1981). The bark and roots are used for backache and a persistent cough. Leaves and bark are used for soap (Pooley, 1993) In Swaziland, the bark is used for the acquisition of metaphysical powers (Adeniji et al., 1998). It is used to make mischief with others and by the *sangoma* in washing ceremonies.
8. *Aloe rupestris* Baker (Asphodelaceae); *umHlabandlanzi;* [DSC11]	*umHlabandlanzi* RH*; inKalane* RH; *uNdlampofu* R*; uNomaweni* R; *uPhondonde* RH*; uMpondonde* RH*; inkalane* D *(S)*	GM: Used to make snuff. SF: The leaves are mixed with *imPhilo* (*Callilepsis laureola*?), boiled in water, and the water is taken for a calming effect.[b]	Used for medicinal and magical purposes (Hutchings et al., 1996). No similar Zulu uses could be found in the literature. In Swaziland, it is used to make snuff, and roots are used for toothache (Dlamini, 1981).
9. *Annona senegalensis* Pers. (Annonaceae); *isiPhofa*[a]; [BMC50]; [DSC12]	*isiPhofu* RH*; umHlalajuba* RH; *umThofa* RH *; umTelemba* AD*(S); pofugwane* D (S)	GM: Herd boys take the fruit to eat when out in the fields. SF: The root bark is ground, boiled in water, and used to wash the body to make skin soft.[b]	Used for medicinal and magical purposes and has toxic characteristics (Cunningham, 1988; Dlamini, 1981; Hutchings et al., 1996). The roots are mixed with *Trema orientalis* and taken as emetics. Roots are also used to treat madness, ward off dizziness, and induce forgetfulness in small babies to assist with weaning (Palmer and Pitman, 1972b). No similar Zulu uses could be found in the literature. Bark is used to treat burns and wounds in Swaziland (Adeniji et al., 1998). Roots are used as a cure for dizziness and madness. Bark for burns and wounds and as an emetic. Fruit is edible (Dlamini, 1981).
10. *Apodytes dimidiata* E.Mey. ex Arn. subsp. *dimidiata* (Icacinaceae); *iDakane*[a]; [DSC13]	*umDakane* RH*; umdzagane* D (S)	SF: The leaves[b] are mixed with *imPhilo,* (*Callilepsis laureola*?) infused in water and sprinkled around the garden to ward off evil spirits.	Used for medicinal and magical purposes (Hutchings et al., 1996). The root bark is used in a mixture as enema for intestinal parasites (Bryant, 1966). Bark and leaves as used as purgatives for calves (Gerstner, 1938). Bark is used to ward off evil spirits and treat worms in cattle but not in humans.
11. *Azima tetracantha* Lam. (Salvadoraceae); *isiNungwane*[b]; [BMC02]; [DSC17]	*isiKhumukele* RH*; umGeza* R; *inGungumela* RH; *ihlazane* H; *ligumkeli* D (S)	SF: The root[b] is used to treat toothache.	Used for medicinal purposes and has toxic characteristics (Cunningham, 1988; Hutchings et al., 1996). The sap is used for toothache, as a disinfectant and for snakebite (Gerstner, 1941; Palmer and Pitman, 1972c; Pooley, 1993).
12. *Balanites maughamii* Sprague (Balanitaceae); *umDlulamithi*[b]; [BMC211]	*umNulu* RH*; uGobandlovu* RH; *uMandulo* R*; iPhamba* RH*; iPhambo* R; *iPhamu* RH*; liphambo* D (S)	GM/SF: Good luck. If you own a tuck-shop, the root bark is used to attract customers.[a]	Used for medicinal and magical purposes and has toxic characteristics (Cunningham, 1988; Dlamini, 1981; Hutchings et al., 1996; Liengme, 1981; Pooley, 1993). Roots and bark are used as ingredients in protective rituals against evil spirits (Palmer and Pitman, 1972b). Bark is used to make an exhilarating bath. Decoction of roots and bark is used for divining and to ward off evil spirits in Swaziland. Bathing in bark infusion is stimulating (Dlamini, 1981).
13. *Brachylaena discolor* DC. (Asteraceae); *iPhahla;* [BMC104]; [DSC21]	*umPhahla* RD*; iphahla* H*; umDuli* RH; *umhlume* D (S)	GM: The timber is used for building and the plant is used to treat stomach-ache.[a] SF: The leaves are used to make snuff[b] and a leaf is taken with to go and talk to the ancestors.[a]	Used for medicinal and magical purposes (Cunningham, 1988; Cunningham and Zondi, 1991; Hutchings et al., 1996). Leaves are ingredients in infusions taken as purgatives against intestinal parasites (Bryant, 1966). Leaves are taken as tonics (Palmer and Pitman, 1972c), used to treat diabetes and renal conditions and used as antihelmintics for livestock in KwaZulu-Natal (Mabogo, 1990).
14. *Bridelia cathartica* Bertol.f. (Euphorbiaceae); *umKhawulangazi*[a]; [BMC19]; [DSC22]	*umNwangazi* RH*; umThundangazi* RH*; umZilanyoni* RH*; umnwangasi* D (S)	SF: When animal has a wound, the bark is ground into powder and rubbed into wound to kill the worm.[b] GM: An infusion is	Used for medicinal and magical purposes and has toxic characteristics (Hutchings et al., 1996; Pooley, 1993). The plant is used as love charm medicines and for patients thought to have been bewitched (Gerstner, 1941). It is also used in various ways by sorcerers. No similar Zulu uses could be found in the literature.

		made from the leaves to soak feet to relieve pain in the feet.[b]	Fruit is used medicinally (Dlamini, 1981), and *B. micracantha* is used to treat asthma in Swaziland (Adeniji et al., 1998).
15. *Canthium ciliatum* (Klotzsch) Kuntze (Rubiaceae); *isiKwakwane*[b]*;* [BMC178]	*umGomisentabeni* [RH]; *inGqanganeyehlathi* [R]; *isiHlungusikankonka* [R]; *uMevane* [RH]; *Umutfwamini* [D]*(S)*	GM: The fruit is eaten.	Used for medicinal and magical purposes (Hutchings et al., 1996; Pooley, 1993). Roots are used by traditional healers as a substitute for *Turraea floribunda* in emetics taken to induce trances before divining dances (Gerstner, 1941). The fruit is eaten in Swaziland (Dlamini, 1981).
16. *Canthium inerme* (L.f.) Kuntze (Rubiaceae); *umVuthwamini;* [BMC48]; [DSC25]	*umVuthwamini* [RH]*; iTobho* [R]*; isitobe* [H]*; Umutfwamini* [A]*(S); uMevane* [D] (S)	GM/TN/SM: The fruit is eaten.	Used for medicinal purposes (Cunningham, 1988; Hutchings et al., 1996). The leaves are used in a mixture to treat stomach complaints (Bryant, 1966). They are used with milk to treat dysentery and diarrhea. In Swaziland, the fruit is edible but insipid (Dlamini, 1981).
17. *Canthium spinosum* (Klotzsch) Kuntze (Rubiaceae); *isiTobe*[b]*;* [BMC76] ;[DSC24]	*umCenyane* [RH]*; isipamabatu* [H]*; umPhembedu* [R]; *umVuthwamini-omncane* [R]	GM: The fruit is eaten.	The plant is used for traditional medicine (possibly for stomach complaints) (Hutchings et al., 1996)
18. *Capparis sepiaria* L. (Capparaceae); *uSondeza;* [BMC23]; [DSC26]	*uSondeza* [RH]*; liphambo* [D] (S)	SF: The root is dried, mixed with *inKosazane* and hippo fat, and rubbed on the face for good luck with a job.[a]	Used for medicinal and magical purposes (Hutchings et al., 1996).The plant is used as protection against lightning and to ward off evil (Pooley, 1993).
19. *Carissa tetramera* (Sacleux) Stapf (Apocynaceae)*; uQondo*[b]*;* [BMC54]; [DSC27]	*Lucondvo* [D] (S)	TN: The fruit is crushed and mixed with water to make a refreshing drink.[b]	No similar Zulu uses could be found in the literature. Used for medicinal purposes in Swaziland and the fruit is edible (Dlamini, 1981).
20. *Chaetacme aristata* Planch. (Celtidaceae); *umKhovothi;* [BMC184]; DSC29]	*umKhovothi* [RH]*; umBambhangwe* [RH]	SF: The bark is mixed with *umSukumbili* (*Gardenia* sp?), burned in the fire and the coals are ground and put on a wound for healing.[b]	Used for medicinal purposes and has toxic characteristics (Hutchings et al., 1996). The bark is used to treat hemorrhoids (Bryant, 1966), and powdered roots are used as dental anodynes (Watt and Breyer-Brandwijk, 1962). No similar Zulu uses could be found in the literature.
21. *Cissus rotundifolia* (Forssk.) Vahl (Vitaceae); [BMC92]; [DSC89}	*Lidlebendlovu* [D] (S); *nyokane* [D] (S); *umtsebulo* [D] (S)	SF: When someone puts *muthi* on you to make you itchy – the plant is used to stop the itchiness.[b]	No similar Zulu uses could be found in the literature. Roots are used a cleanser and roots and leaves are used medicinally in Swaziland (Dlamini, 1981).
22. *Combretum apiculatum* Sond. subsp. *apiculatum* (Combretaceae); *umBondwe;* [BMC78]; [DSC33]	*umBondwe* [RH]*; umbondo*[H]*; umBondwe-omnyama* [RH] *imbondvo lemhlophe*[D] (S)	SF: If you eat too much sugar, an infusion of the root bark is prepared and the water is taken to make you vomit.[a]	Used for medicinal purposes (Hutchings et al., 1996).The leaves are used in steam baths or administered as enemas for abdominal disorders (Watt and Breyer-Brandwijk, 1962).
23. *Combretum molle* R.Br. ex G.Don (Combretaceae) ; *umBondwe;* [BMC194]; [DSC32]	*umBondwe* [RH]*; umBondwe-omhlope* [RH]*; umBondo* [RH]; *imbondvo lemhlophe* [D] (S)	SF: An infusion of the leaf is taken to remove worms from the body.[b] TN/SM: The leaves are used for chest complaints.[b]	Used for medicinal purposes (Cunningham, 1988; Cunningham and Zondi, 1991; Hutchings et al., 1996).The leaves are used as wound dressing. Leaves and roots are used as a snakebite antidote. Roots are used to treat abortion and constipation. Inner bark is used to treat stomach complaints. Plants are used for fevers (Pooley, 1993). No similar Zulu uses could be found in the literature.
24. *Commiphora neglecta* I.Verd. (Burseraceae); *umNyela;* [BMC171]; [DSC34]	*umNyela* [R] *; isiNgankomo* [R] *liminyela* [D] (S)	SF: No medicinal use. If someone dies, a cutting is planted on the site to mark the grave.[b]	No similar Zulu uses could be found in the literature. Roots are edible and as a water source (Dlamini, 1981).
25. *Cussonia zuluensis* Strey (Araliaceae); *umSenge;* [BMC197]; [DSC35]	*umSenge* [RD]*; umSengane* [R]	GM: An infusion of the root is taken to make a person vomit.[b] SF: The root bulb is boiled and when still hot, put on a swollen limb to ease swelling.[b]	No similar Zulu uses could be found in the literature. Used as an emetic in Swaziland (Dlamini, 1981).

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Table 1 (*continued*)

Species name; family name; vernacular name(s); voucher specimens [BMC] and photographs [DSC]	Known Zulu name(s) [where applicable, Swazi name(s) are indicated by (S)](Raymond, 2005=R, Hutchings et al., 1996=H, Adeniji et al., 1998=A; Dlamini, 1981=D)	Anecdote or use(s) recorded in Kwanibela	Known Zulu (and Swazi) uses (cited directly from source)
26. *Dalbergia armata* E.Mey. (Fabaceae); *umHluhluwe;* [BMC28]	*umHluhluwe* R; *umThathawe* R; licobhe D (S)	SF: The roots are boiled in water and the water is gargled to relieve toothache.[b]	The branches are used to make muzzles for calves to prevent them from suckling (Coates Palgrave, 1977). No similar Zulu uses could be found in the literature.
27. *Dialium schlecteri* Harms (Fabaceae); *umThiba;* [BMC49]; [DSC36]	*umThiba* RH	GM: The pods are eaten. SF: The roots are mixed with *uMavumbu* (*Uvaria* sp.?), infused in water and ingested to stop anus from itching (possible de-wormer?).[b]	Used for medicinal purposes (Hutchings et al., 1996; Pooley, 1993).The ground bark is applied to burns, and the wood is reported to be insect-proof (Palmer and Pitman, 1972b). No similar Zulu or Swazi uses could be found in the literature.
28. *Dichrostachys cinerea* (L.) Wight & Arn. (Fabaceae); *uGagane; uShashane*[a]*;* [BMC199]; [DSC37]	*umSheshane* R; *uGagane* RH; *uGagu* R; *uNukelambiba* R; *umThezane* RH; *isiZaka* R; *umZilazembe* RH *mzilazembe* D (S); *umtsetane* D (S)	GM: The wood is used to *braai*. SF: The pods are boiled, removed from the water, and the water is left to cool. Drops of water are put in the ear to draw out an insect.[b]	Used for medicinal and magical purposes and has toxic characteristics (Cunningham, 1988; Cunningham and Zondi, 1991; Pooley, 1993; Walker, 1996). The roots are used as ingredients in a mixture taken to ease pain or rubbed into incisions cut over painful area (Palmer and Pitman, 1972b). No similar Zulu uses could be found in the literature. Many Swazi medicinal uses, possible antibiotic, and pain relief (Dlamini, 1981). Roots are used for local anesthesia and as a snakebite antidote. Used as firewood.
29. *Diospyros villosa* (L.) De Winter (Ebenaceae); *iPoypoyi*[b]*;* [BMC185]	*umBongisa* RH; *inDodemnyama* RH; *uMbishimbishi* RH	SM: The leaves of *iPoyiPoyi* are chewed to clean and whiten teeth.[b]	Used for medicinal purposes (Hutchings et al., 1996; Watt and Breyer-Brandwijk, 1962; Williams, 2007). No similar Zulu or Swazi uses could be found in the literature.
30. *Elaeodendron transvaalense* (Burtt Davy) R.H.Archer (Celastraceae); *inGwavuma;* [BMC122]; [DSC28]	*inGwavuma* RH; *umGugudo* RH; *inQotha* RH	SF: When still an apprentice of a *sangoma*, an infusion of the roots and leaves are taken to vomit and cleanse in order to make the transition to a *sangoma*.[b]	Used for medicinal and magical purposes and has toxic characteristics (Cunningham, 1988; Dlamini, 1981; Hutchings et al., 1996; Pooley, 1993).The bark is taken for stomach ache and fevers (Gerstner, 1939). It is regarded as best available treatment for such ailments (Palmer and Pitman, 1972b). The bark is taken for diarrhea and intestinal cramps (Pujol, 1990). No similar Zulu uses could be found in the literature.
31. *Erythrina caffra* Thunb. (Fabaceae); *umSinsi;* [DSC106]	*umSinsi* RH	T: The seeds are strung up to make necklaces and placed along the fence of a homestead by an *inyanga* to prevent the entry of thieves onto the property.[b]	Used for medicinal and magical purposes and has toxic characteristics (Hutchings et al., 1996; Pooley, 1993; Walker, 1996).The leaves are used in a mixture for urinary complaints (Hulme, 1954) known as *iqondo* (stone in the bladder) and for venereal diseases (Bryant, 1966). Used for earache. No similar Zulu uses could be found in the literature.
32. *Erythrina humeana* Spreng. (Fabaceae); *umSinsana;* [DSC41]	*umSinsana* R; *iKati* R; *umnsinsana* D (S)	SF: A cutting is planted in the garden to ward off evil spirits.[b]	Used for medicinal purposes (Pooley, 1993; Walker, 1996). The roots used for bronchitis, tuberculosis, chest problems, and sprains (Coates Palgrave, 1977). No similar Zulu uses could be found in the literature.
33. *Erythroxylum delagoense* Schinz (Erythroxylaceae); *inKhuthuzo*[b]*;* [BMC26]; [DSC42]	*umPhuzi* R; *uBambamatsheni* R; *umBhamatsheni* R; *umBhuletsheniwangaphandle* R; *uMbamatsheni* R; *ijobe* D (S)	SF: The berries are given to babies for throat and chest problems.[b]	No uses are recorded for *E. delagoense*; however, *E. pictum* is used medicinally (Hutchings et al., 1996). Used by the *sangoma* for washing ceremonies and medicinally as emetic and herb booster (Dlamini, 1981).
34. *Euclea divinorum* Hiern (Ebenaceae); *isiGcakaca*[b] [BMC123]; [DSC44]	*umHlangula* RH; *uBophanyamazane* RH; *iChithamuzi* RH; *iDungamuzi* RH; *umNcafuzana* RH; *umShekisana* RH; *sijelele* D (S)	SF: Hunters mix the bark with water and sprinkle the water in the tracks of an animal so that it will not detect the hunters[b].	Used for medicinal and magical purposes (Cunningham, 1988; Cunningham and Zondi, 1991; Dlamini, 1981; Hutchings et al., 1996; Pooley, 1993).The fruit is taken as a strong purgative (Gerstner, 5226 PRE). No similar Zulu uses could be found in the literature. Wood reputed to have supernatural powers and is never used as fuel in Swaziland. Branches are used as a good luck charm (Dlamini, 1981).

35. *Euclea natalensis* A.DC. subsp. *natalensis* (Ebenaceae); *isiZimane*[a]; [BMC35]; [DSC45]	*isiNzimane* [RH]; *isiZamane* [R]; *umzimane* [H]; *iDungamuzi* [RH]; *umCafuthane* [R]; *iChithamuzi* [RH]; *umHlalanyamazane* [RH]; *inKaza* [R]; *inKhunzana* [R]; *inKhunzi-ebomvana* [R]; *inKunzane* [RH]; *inKunzi-emnyama* [RH]; *uManyathi* [R]; *iNkunzi-emnyama* [R]; *umTshikisane* [R]	GM: Not used for building—the wood is too weak.	The root bark is an ingredient in decoctions known as *imBhiza* and is taken for scrofulous swellings (Bryant, 1966). It is also used as a blood purifier and for stomach disorders. Roots are used in a mixture with other plants and a sharp instrument is used to insert the mixture into the chest skin for pleurisy. They are also used for venereal disease known as drop (urethral discharge) and dysmenorrhea. A strong enema is made from unspecified parts (Gerstner, 1939). Bark is used in a mixture to treat urinary tract infections, venereal diseases, and susceptibility to sores. Bark is used for schistosomiasis and protective sprinkling charms. It is mixed with crocodile fat or vaseline and applied to abnormal growths and chancres. The wood is avoided as firewood (Pooley, 1993).
36. *Euphorbia ingens* E.Mey. ex Boiss. (Euphorbiaceae); *umHlonhlo;* [DSC47]	*umHlonhlo* [RH]; *uMahetheni* [RH]; *abaPhaphi* [R]; *inshumpha* [D] (S)	SF: A cutting is planted in the garden to ward off evil spirits.[a]	Used for medicinal and magical purposes and has toxic characteristics (Dlamini, 1981; Hutchings et al., 1996).The latex is taken in very small doses as a purgative (Gerstner, 1939), is used as an unspecified cancer cure, and is taken for warts (Pooley, 1993). No similar Zulu uses could be found in the literature. It is used as lightning protection in Swaziland (Dlamini, 1981).
37. *Ficus natalensis* subsp. *natalensis* Hochst. (Moraceae); *umDende;* [BMC180]	*umDende* [RH]; *umDenda* [R]; *isiHlamfani* [R]; *umThombe* [RH]	SF: The bark is mixed with cow fat and *imPepo (Helichrysum* sp.), burned, and the smoke is inhaled to prevent a person from "falling over suddenly" (fainting?).[b]	Used for medicinal purposes (Hutchings et al., 1996; Pooley, 1993). Bark is used as an ingredient in *inEmbe*, taken during pregnancy to ensure easy childbirth (Gerstner, 1941). The roots are taken to cleanse the blood (Pujol, 1990). The leaves are used as compresses and poultices for wounds, boils, warts, and growths. No similar Zulu uses could be found in the literature.
38. *Gardenia cornuta* Hemsl. (Rubiaceae); *umValasangweni;* [DSC49]	*umValasangweni* [RH]; *umHlale* [R]; *uNomphumela* [RH]	SF: A cutting is planted in the garden to ward off evil spirits.	Used for medicinal and magical purposes (Dlamini, 1981; Hutchings et al., 1996). Infusions from fruits and roots are taken as emetics (Coates Palgrave, 1977), and it is planted at homesteads to keep evil spirits away (Pooley, 1993).
39. *Grewia caffra* Meisn. (Tiliaceae); *uPata*[a]; [BMC33]; [DSC51]	*iPhatha* [R]; *iphata* [H]; *iLalanyathi* [RH]; *isiLandula*[RH]; *uMunyumunyu* [R]; *umuNuzwane* [R]; *iSaka* [RH]	SF: The fruit is eaten.	Used for medicinal purposes (Hutchings et al., 1996). The root bark is used for bladder ailments and in infusions, which are administered as enemas (Gerstner, 1939).
40. *Grewia microthyrsa* K.Schum. ex Burret (Tiliaceae); *iSonyane*[b]; *uPata*[a]; [BMC86]; [DSC50]	*uMunywana* [R]; *umuNyane* [R]	SF: The root is boiled in water, removed and the water is taken to make the man's sperm stronger (enhance male fertility).[b]	No similar Zulu uses could be found in the literature.
41. **Hibiscus cannabinus* L. (Malvaceae); *umKakane*[b]; [BMC133]	*uDekane* [R]	SF: The whole plant is boiled to treat "chicken pox".[b]	Used for medicinal purposes (Kokwaro, 1976; Williams, 2007). No similar Zulu uses could be found in the literature.
42. *Hypoxis* species (Hypoxidaceae); *inKhomfe*	*inKhomfe* [RH]	SF: Used to treat HIV (method undisclosed).	A number of species are reputed to be toxic, although many are eaten and used for HIV treatments (Hutchings et al., 1996).
43. *Kigelia africana* (Lam.) Benth. (Bignoniaceae); *umVongothi*	*umVongothi* [RH]; *iBelendlovu* [R]; *umBongoyhi* [R]; *umFongothi* [RH]; *umVungutu* [RH]	SF: A cutting is planted in the garden to ward off evil spirits. A young fruit is cut and the "water" (fruit sap) is extracted, the "water" is put into an incision on the penis and the fruit is removed from the tree when desired size is reached to match penis size.[b]	Used for medicinal and magical purposes and has toxic characteristics (Cunningham, 1988; Dlamini, 1981; Hutchings et al., 1996; Liengme, 1981).The fruit is used as a dressing for ulcers, for syphilis, rheumatism (Palmer and Pitman, 1972b), and acne (Pooley, 1993). Fruit and bark decoctions are used for children with stomach ailments. Fruit is traditionally used as protective war charms (Hulme, 1954). Plant parts are used as purgatives (Gerstner, 1938). No similar Zulu uses could be found in the literature.
44. *Lagynias lasiantha* (Sond.) Bullock (Rubiaceae); *umViyothojane*[a]; [BMC81] ; DSC104]	*umViyoshwane* [RH]; *umTulwa* [R]; *uDulamuthwa* [R]; *umTula* [R]; *isiBangabulonga* [RH]; *umPilogojwane* [R]; *isiThobe* [RH]; *umVilithotshwana* [RH]	SF: The fruit is eaten.	Used for medicinal purposes (Hutchings et al., 1996; Walker, 1996).The powdered leaves are used for diarrhea and dysentery (Watt and Breyer-Brandwijk, 1962).

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45. *Landolphia kirkii* Dyer (Apocynaceae); *umBungwa;* [BMC207]; [DSC57]	*umBungwa* R; *umBunga* R	SF: The fruit is eaten. If all teeth in the mouth are paining, it is believed to be a sign of an evil spirit. The root is infused in water and the water is gargled to relieve pain.[b]	Roots used for abdominal pain (Gelfand et al., 1985) and as an aphrodisiac (Haerdi, 1964). No similar Zulu uses could be found in the literature.
46. *Lippia javanica* (Burm.f.) Spreng. (Verbenaceae); *umSozwane*[a]*;* [BMC101]; [DSC59]	*inSuzwane* RH; *umswazi* H; *Luhlanga* A(S); *Umsutane* A(S)	SF: The leaves are boiled in water and the whole body is covered over the steam to cure fever. TN/SM: The leaves are burned in the fire and the smoke is used to repel mosquitoes.[b]	Used for medicinal and magical purposes and has toxic characteristics (Cunningham, 1988; Cunningham and Zondi, 1991; Liengme, 1981).The leaves are used for colds and coughs, to treat febrile rashes and, sometimes, as protection from dogs and crocodiles (Doke and Vilikazi, 1972). Leaves are used in washes and in poultices for chest ailments (Roberts, 1990), taken as poultices to warm up lower limbs (Hutchings et al., 1996), for gangrenous rectitis (Bryant, 1966) and as an infusion for diarrhea (De Wet et al., 2010). Roots are used to treat napkin rash and night terrors in Swaziland (Adeniji et al., 1998).
47. *Ozoroa paniculosa* (Sond.) R.& A.Fern. (Anacardiaceae); *isiFico;* [BMC66]	*isFico* RH; *isifica* H; *isifice* H	SF: The leaves are mixed with *inGanga*, boiled and the head is covered over the steam, which is inhaled to avoid bad dreams.[b] TN/SM: The bark and roots are infused in water and taken as a health tonic.[b]	The bark is used for acute inflammatory conditions of the chest and also for dysentery (Watt and Breyer-Brandwijk, 1962). No similar Zulu uses could be found in the literature.
48. *Pappea capensis* Eckl. & Zeyh. (Sapindaceae); *umQokolo*[a]*;* [BMC74]; [DSC68]	*umGqogqo* RH; *umQhoqho* RH; *umQhokwane* RH; *indaba* RH; *iTshe* R; *uVuma-embovu* RH; *umVuma* RH	SF: Only birds eat the fruit. No other function is known.	Used for medicinal and magical purposes and has toxic characteristics (Hutchings et al., 1996; Pooley, 1993).The bark and roots are used as traditional medicine (Cunningham, 1988), and plant parts are used medicinally for calves (Gerstner, 1939).
49. *Portulacaria afra* Jacq. (Portulaceae); *isiQoqo*[a]	*isiQoqoqo* R; *isAmbilane* R; *isiCococo* R; *inDibili-enkhulu* R; *inDibili* R; *isiDondwane* R; *inTelezi* R	SF: Used for grazing.	No similar Zulu uses could be found in the literature.
50. *Putterlickia verrucosa* (E.Mey. ex Sond.) Szyszyl. (Celastraceae); *umHlabankonkoni;* [BMC52]; [DSC72]	*umHlabankonkoni* R; *uHlinzanyoka* R	SF: When the *sangoma* goes to the sea, he/she takes a buffalo tail and cleans the tail with the root. *Sangoma* is, then, taken into the sea by a snake which gives him/her strength and powers.[b]	No similar Zulu uses could be found in the literature.
51. *Rhoicissus digitata* (L.f.) Gilg & M.Brandt (Vitaceae); *isiNwazi;* [BMC109]; [DSC73]	*isiNwazi* R; *umNangwazi* R; *umPhambane* R; *iTangalehlathi* R; *umThwazi* R	GM: The root is boiled and mixed with other plants if someone wants a baby (to enhance fertility).[a]	Used for medicinal purposes and has toxic characteristics (Cunningham and Zondi, 1991; Hutchings et al., 1996).The roots are used as traditional medicine (Cunningham, 1988). The common Zulu names suggest that they are probably used during pregnancy to facilitate delivery and for cattle diseases in the same way as *R. tomentosa*. Roots are used as a stomachic (Liengme, 1981).
52. *Rhoicissus tomentosa* (Lam.) Wild & R.B.Drumm. (Vitaceae); *isiNwazi;* [DSC74]	*isiNwazi* RH; *umphambane* H	GM: The root is boiled and mixed with other plants if someone wants a baby (to enhance fertility).[a]	Used for medicinal purposes and has toxic characteristics (Dlamini, 1981; Hutchings et al., 1996). Milk decoctions of the roots are administered as antihelmintics to calves (Watt and Breyer-Brandwijk, 1962). They may also be used in the same way as *R. tridentata* to facilitate delivery.

53. *Sansevieria hyacinthoides* (L.) Druce (Dracaenaceae); *isiKholokotho;* [DSC77]	*isiKholokotho* [RH]; *isiKwendle* [RH]; *isiTokotoko* [RH]; *Sikenga* [A](S)	SF: The root is boiled in water and the water is gargled to treat toothache.[b]	Used for medicinal and magical purposes (Cunningham, 1988; Hutchings et al., 1996). The leaf sap is used for earache (Bryant, 1966). Roots are taken as protective charms after a member of the kraal has been struck by lightning or if a member is thought to have been bewitched (Watt and Breyer-Brandwijk, 1962; Roberts, 1990). No similar Zulu uses could be found in the literature. Leaves used for treating otitis in Swaziland (Adeniji et al., 1998).
54. *Sarcostemma viminale* (L.) R.Br. (Apocynaceae); *umBhelebhele;* [DSC78]	*umBhelebhele* [RH]; *inGotsha* [RH]; *umNembenembe* [R]	GM: The flowers and only the ends of the stems are eaten.[a]	Used for medicinal and magical purposes and has toxic characteristics (Cunningham and Zondi, 1991; Hutchings et al., 1996; Liengme, 1981). The latex is applied to the eyes to relieve pain caused by latex of *Euphorbia ingens* (Watt and Breyer-Brandwijk, 1962). Unspecified parts are taken as emetics for heartburn and the stem is taken as an infusion for diarrhea in Maputaland (De Wet et al., 2010).
55. *Scadoxus puniceus* (L.) Friis & Nordal (Amaryllidaceae); *iDumbelethathi*[a]	*iDumbelentaba* [R]; *iDumbelikanhloyile* [RH]; *umPhompo* [RH]	SF: The plant is burned in the fire, ground and rubbed on the back of a small baby's head where there is a "red spot".[b]	Used for medicinal and has toxic characteristics (Cunningham, 1988; Dlamini, 1981; Hutchings et al., 1996; Walker, 1996). The roots are taken as an emetic for coughs. Plant parts are taken in a mixture during pregnancy to ensure a safe delivery (Gerstner, 1941). No similar Zulu uses could be found in the literature.
56. *Schotia brachypetala* Sond. (Fabaceae); *umGxamu;* [DSC79]	*umGxamu* [RH]; *iHluze* [RH]; *uVovovo* [RH]	SF: The bark is boiled in water and removed. One cup of the infusion is taken, followed with 10 l of water to make a person vomit to treat "flu".[b]	Used for medicinal and magical purposes and has toxic characteristics (Cunningham, 1988; Dlamini, 1981; Hutchings et al., 1996; Pooley, 1993). Bark is used as an ingredient in *iKhubalo* (medicine) to ward off evil or to cure unspecified ailments. It is taken or washed with during purification rites after the death of a relative, used to strengthen body and steam the face (Pujol, 1990). Bark is used for pimples (Hulme, 1954) and diarrhea (De Wet et al, 2010), while decoctions are taken for heartburn and after excessive beer drinking (Watt and Breyer-Brandwijk, 1962). The roots used for dysentery and diarrhoea (Bryant, 1966). The bark is used to make red dye for the *sangoma*'s cloaks. No similar Zulu uses could be found in the literature.
57. *Sclerocarya birrea* (A.Rich.) Hochst. (Anacardiaceae); *umGanu;* [BMC177]; [DSC62]	*umGanu* [RH]; *umCane* [R]; *umGamu* [R]	SF: For a runny stomach, an infusion of the bark is taken to stop diarrhea. Beer is made with the fruit.	Used for medicinal purposes (Cunningham, 1988).The bark is used as an enema or infusion for malaria and diarrhea (De Wet et al., 2010), taken as tea twice a day to strengthen the heart or as a blood-cleaning emetic before marriage (Gerstner, 1938; Pujol, 1990). Fruit is used for destruction of ticks. Twigs are used to make a fire under bath, in which new born girl and mother are washed to ensure the baby is blessed with fertility, softness, tenderness, and early maturity (Palmer and Pitman, 1972b). The bark is used to treat healer and patient with gangrenous rectitis (Bryant, 1966). Bark is used to treat bloody stool in Swaziland (Adeniji et al., 1998).
58. *Searsia gueinzii* Sond. (Anacardiaceae); *inHlokoshiyane;* [BMC08]; [DSC75]	*inHlokoshiyane* [RH]; *umPhondo* [RH]	SF: The leaves are boiled in water and the body is covered over the steam to cure "chicken pox".[b]	Used for medicinal purposes (Hutchings et al., 1996). The plant is used as traditional medicine, especially for eye complaints (Pooley, 1993). No similar Zulu uses could be found in the literature.
59. *Senecio* species (Asteraceae); *iCishamlilo;* [BMC102]; [DSC80]		SF: The stem is burned in the fire and put on swollen limb to reduce swelling. The stem is also put on a leech to remove the parasite from the skin.	Many uses are known for *Senecio* species (Hutchings et al., 1996; Watt and Breyer-Brandwijk, 1962).
60. *Sideroxylon inerme* L. subsp. *inerme* (Sapotaceae); *uMasethole;* [BMC212]; [DSC81]	*aMasethole-amhlope* [RH]; *uMakhwelafingqane* [RH]	SF: Known as "red milkwood" in KwaNibela. The root is placed in the anus (suppository) to cure the "flu".[a]	Used for medicinal and magical purposes (Pooley, 1993). Root bark is administered as an enema to produce drastic perspiration (Gerstner, 1941). The root is applied to incisions on a broken limb after *Trichilia emetica* seed oil has been applied (Palmer and Pitman, 1972c). Bark is used as traditional medicine (Cunningham, 1988). Plants parts are taken to dispel bad dreams (Watt and Breyer-Brandwijk, 1962) and administered as tonics to calves and goats.
61. *Solanum elaeagnifolium* Cav. (Solanaceae)		SF: The fruit is burned on the fire and the smoke is taken into the mouth to take away pain in the teeth.[b]	Uses have been recorded for many species of *Solanum* (Hutchings et al., 1996) but not for *S. elaeagnifolium.*

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Species name; family name; vernacular name(s); voucher specimens [BMC] and photographs [DSC]	Known Zulu name(s) [where applicable, Swazi name(s) are indicated by (S)](Raymond, 2005=R, Hutchings et al., 1996=H, Adeniji et al., 1998=A; Dlamini, 1981=D)	Anecdote or use(s) recorded in Kwanibela	Known Zulu (and Swazi) uses (cited directly from source)
62. *Spirostachys africana* Sond. (Euphorbiaceae); *umThombothi;* [BMC210]	*umThombothi* RH; *injuqu* H; *Umtfombotsi* A(S)	SF: An infusion is prepared from the bark and used for wound healing.[b] The timber is used for building.TN/SM: Bait is dipped in the tree sap and used to poison animals when hunting.[b]	Used for medicinal and magical purposes and has toxic characteristics (Cunningham, 1988; Cunningham and Zondi, 1991; Dlamini, 1981; Pooley, 1993).The bark is used for stomach ulcers and acute gastritis (Pujol, 1990). Roots and bark are used in small quantities for stomach ulcers and eye washes (Palmer and Pitman, 1972b). Steam is believed to cure eye complaints. Slightly burnt wood is put in the nose to cure headaches and dry bark is used in embrocations for rashes in babies. The sap is applied to boils and used on cattle sores to kill maggots (Hutchings et al., 1996). No similar Zulu uses could be found in the literature. Roots are used to treat infertility in Swaziland (Adeniji et al., 1998).
63. *Strychnos decussata* (Pappe) Gilg (Strychnaceae); iN*kuzazulu*[a]; [BMC141]	*umKhombazulu* RH; *umPhathawenkosi-emhlope* RH; *umHamalala* R; *uHlalale* R; *umHlalane* R; *umKhangala* RH; *umLahlankosi* RH	SF: The root[a] is put in the garden to fight thunderstorms created by the *sangoma.*	Used for medicinal and magical purposes and has toxic characteristics (Hutchings et al., 1996). Root bark is taken as snuff and in water for stomach gripes and cramps (Palmer and Pitman, 1972c). Unspecified parts are traditionally used with crocodile fat against lightning (Pooley, 1993).
64. *Strychnos henningsii* Gilg (Strychnaceae); *umNqonjo*[a]; [BMS167] ; [DSC88]	*umNono* RH; *uManana* RH; *umDunye* RH; *umQalothi* RH; *umQaloti* RH	GM/SF: The fruit is eaten.	Used for medicinal purposes and has toxic characteristics (Cunningham, 1988; Cunningham and Zondi, 1991; Hutchings et al., 1996; Pooley, 1993).The roots are used for stomach complaints. Bark is taken for nausea (Watt and Breyer-Brandwijk, 1962) and chewed for stomach complaints (Doke and Vilikazi, 1972). Parts are used for tapeworm (Bryant, 1966). Bark taken as a mixture for rheumatic fever and used for dysmenorrhea.
65. *Strychnos madagascariensis* Poir. (Strychnaceae); *umKwakwa;* [BMC55]; [DSC85]	*umKwakwa* R; *iGulakuza* R; *uHlalale* R; *umHlalane* R; *umNconjwa* R	GM/SF: The fruit is eaten. T: The fruit is mixed with mealy meal to make porridge.[b]	Root, bark, and leaves are taken as an infusion for diarrhea (De Wet et al., 2010). No similar Zulu uses could be found in the literature.
66. *Strychnos spinosa* Lam. (Strychnaceae); *umHlala;* [BMC20]; [DSC87]	*umHlala* RH; *umHla* RH; *umHlalakolontshe* RH	GM/SF: The fruit is eaten.	Used for medicinal and magical purposes and has toxic characteristics (Cunningham, 1988; Hutchings et al., 1996; Pooley, 1993; Walker, 1996). The species has many uses (Neuwinger, 2000). The roots or fruit pulp are used in mixture for snakebite (Bryant, 1966). Used for fevers, as emetics and for sore eyes (Watt and Breyer-Brandwijk, 1962). The crushed seeds are used as a snakebite antidote (Gerstner, 1939).
67. *Syzygium cordatum* Hochst. ex C.Krauss. (Myrtaceae); *umDoni;* [BMC204]	*umDoni* RH; *umHlukazi* R; *umKhethunge* R; *umuSwi* R	SF: The leaves and the stem are boiled in water and the water is gargled to disinfect a wound in the mouth.[b] TN/SM: The fruit is eaten.	Used for medicinal and magical purposes and has toxic characteristics (Dlamini, 1981; Hutchings et al., 1996). The bark is used as traditional medicine (Cunningham, 1988) and for diarrhea (De Wet et al., 2010). Parts are used for respiratory ailments, including tuberculosis and for stomach complaints and emetics (Watt and Breyer-Brandwijk, 1962; Pooley, 1993). No similar Zulu uses could be found in the literature.
68. *Tabernaemontana elegans* Stapf (Apocynaceae); *umKhadlu;* [DSC91]	*umkhadlu* H; *umKhahlu* R; *umKhahlwana* RH	SF: If you get hit by someone, the "blood" of the leaf (latex) is put into the wound to stop the bleeding.[b] SF/TN/SM: The "blood" of the leaf is also added to milk to make it last longer as it changes to *amasi.*[b] SM: To treat snakebite, the latex is injected into the skin with a thorn and put on the wound around the bite.[b]	Used for medicinal purposes and has toxic characteristics (Dlamini, 1981; Hutchings et al., 1996). The roots are used for chest complaints (Pooley, 1993). No similar Zulu uses could be found in the literature.

69. *Teclea natalensis* (Sond.) Engl. (Rutaceae); *umOzane;* [BMC146]; [DSC93]	*umOzane* [R]	SF: The fruit is given to baby like a sweet to kill worms in the baby's teeth.[b]	No use is recorded for *T. natalensis*; however, *T. gerrardii* is used medicinally on people (Hutchings et al., 1996).
70. *Tecomaria capensis* (Thunb.) Spach. (Bignoniaceae); *uChacha;* [BMC183]; [DSC94]	*uChacha* [R]; *uGcangca* [R]; *iLozane* [R]; *umuNyanewasehlatini* [R]; *uTshwabezinyoni* [R]	GM: The fruit is eaten by birds. The flower can be sucked for the "sweet water" (nectar).[a]	Used for medicinal and magical purposes and has toxic characteristics (Wright, 1963). The leaves are used for diarrhea and enteritis by the Swazi (Watt and Breyer-Brandwijk, 1962).
71. *Toddaliopsis bremekampii I.Verd.* (Rutaceae); *umTane*	*umTane* [R]; *umOzane* [R]	GM: The timber is used for building.	Used for medicinal purposes (Williams, 2007).
72. *Trichilia emetica* Vahl (Meliaceae); *umKhuhlu;* [BMC203]	*umKhuhlu* [RH]; *umChinsini* [R]; *umKhuhlumanyenye* [R]; *uMathunzini* [RH]; *iXolo* [RH]; *Umkhuhlu* [A](S)	GM/TN/SM: The fruit added to water and left in the sun to ferment. It makes the water milky and is used to make *amasi* ('curds').[b] SF: The bark is mixed with eggs to make the stomach run and cleanse the "small boy" (*itokoloshe*) from the body.[b]	Used for medicinal and magical purposes and has toxic characteristics (Cunningham, 1988; Cunningham and Zondi, 1991; Dlamini, 1981; Hutchings et al., 1996; Liengme, 1981; Pooley, 1993). The bark is used for stomach and intestinal complaints (Bryant, 1966; De Wet et al., 2010). Bark or leaves are used for lumbago, rectal ulceration in children and dysentery (Watt and Breyer-Brandwijk, 1962). Seed oil is rubbed into incisions made over a broken limb, together with *Sideroxylon inerme* (Palmer and Pitman, 1972b). The leaves are worn in burial rituals. It is reported to be very poisonous (Bryant, 1966). No similar Zulu uses could be found in the literature. In Swaziland, the bulb and bark are used to treat lumbago. The bark is used to treat hematuria, urethral discharge and abdominal pain. The fruit is used to treat wounds and the root and bark are used together to treat pregnancy oedema (Adeniji et al., 1998).
73. *Uvaria caffra* E.Mey. ex Sond. (Annonaceae); *uMalumvumba*[a]*;* [DSC98]	*uMaluzwenda-omnyama* [R]; *uMazwenda-omnyama* [RH]; *inKonjane* [RH]	SF: The roots are used as good luck charm.[b] GM: Do not use as a whip to herd cows.	Used for medicinal purposes (Hutchings et al., 1996).
74. *Uvaria lucida* Benth. subsp. *virens* (N.E.Br.) Verdc. (Annonaceae); *uMalumvumba*[a]*;* [BMC18]; [DSC97]	*uMavumba* [RH]; *uMazwenda-omnyama* [RH]	SF: The roots are used as good luck charm.[b] GM: Do not use as a whip to herd cows.	Used for medicinal purposes (Hutchings et al., 1996).
75. *Vangueria infausta* Burch. (Rubiaceae); *umViyo;* [BMC72]; [DSC99]	*umViyo* [RH]; *isAntulu-tshwana* [R]; *iDulumuthwa* [R]; *umFilwa* [R]; *inKhabayomtwana* [R]; *umSunuwengane* [R]; *umThulwa* [RH]; *umViki* [R]; *Umgana* [A](S)	GM: The fruit is used to make *amass.*[b] SF: The leaves are put under chickens' eggs to prevent them from rotting.[b]	Used for medicinal and magical purposes (Dlamini, 1981; Hutchings et al., 1996).The roots and leaves are used for malaria and chest complaints (Pooley, 1993) and as aphrodisiacs. Root and bark are used for diarrhoea (De Wet et al., 2010) No similar Zulu uses could be found in the literature. The bark is used to treat bloody stool in Swaziland (Adeniji et al., 1998)
76. *Warburgia salutaris* (G.Bertol.) Chiov. (Canellaceae); *isiBaha;* [BMC187]	*isibaha*[H]; *isiBhaha* [RH]; *amaZwecehlabayo* [RH]	GM: A mixture of the bark and other plants is given to dogs to make them aggressive.[b] SF: For coughs and "flus", the root bark[b] is ground and boiled for a short time, all the plant material is removed and the water is taken as a drink. Powdered roots are applied inside the holes of the teeth to relieve toothache.[b] If food is not enjoyable, a leaf infusion is taken to enjoy the food. G: The leaves are added to food as a spice to give a peppery taste.[b]	Used for medicinal and magical purposes and has toxic characteristics (Cunningham, 1988; Cunningham and Zondi, 1991; Hutchings et al., 1996; Pooley, 1993).The bark is used for a dry cough (Bryant, 1966) and in emetics or purgatives for febrile complaints, rheumatism and the ailments known as *isiBhobo* (stomach acidity) or *amaNxeba* (wounds/sharp pains), which are traditionally thought to be caused by sorcerery. Bark is an ingredient in an ointment for penile irritation. Leaves are used in a mixture as lotion and applied to the penis in cases of inflammation of the urethra, sores and other irritation. Ointments from leaves and stalks, mixed with bark and fat, may also be used. Cooked roots are taken for coughs (Gerstner, 1939).

(continued on next page)

Table 1 (*continued*)

Species name; family name; vernacular name(s); voucher specimens [BMC] and photographs [DSC]	Known Zulu name(s) [where applicable, Swazi name(s) are indicated by (S)](Raymond, 2005=[R], Hutchings et al., 1996=[H], Adeniji et al., 1998=[A]; Dlamini, 1981=[D])	Anecdote or use(s) recorded in Kwanibela	Known Zulu (and Swazi) uses (cited directly from source)
77. *Ximenia caffra* Sond. (Olacaceae); *umThunduluka;* [BMC209]	*umThunduluka* [RH]*; umGwenya* [RH]*; uMalala* [R]*; uManumbhalo* [R]*; uMatimdolubu* [R]*; umThunduluka-ombomvu* [R]*; Umtfundvuluka* [A]*(S)*	GM: The fruit is eaten.	Used for medicinal and magical purposes and has toxic characteristics (Hutchings et al., 1996; Pooley, 1993). The leaves are used for inflamed eyes (Watt and Breyer-Brandwijk, 1962), and the roots are used as traditional medicine (Cunningham, 1988). The whole plant is used to treat weight loss in Swaziland (Adeniji et al., 1998).
78. *Zanthoxylum capense* (Thunb.) Harv. (Rutaceae); *amaBele*[a]*;* [BMC153]; [DSC100]	*amaBelentombi* [RH]*; amaBelezinshingezi* [RH]*; umLungumabele* [RH]*; uNtlangothi* [R]*; umNungumabele* [R]*; umNungwane-omncane* [RH]*; Umnungu mabele* [A]*(S)*	SF: An infusion of the root is taken to treat toothache. To heal "*iBande*", the root is mixed with hook thorn, burned to coals, ground and inserted into an incision on the skin.[b]	Used for medicinal purposes (Cunningham, 1988; Cunningham and Zondi, 1991; Hutchings et al., 1996; Liengme, 1981; Pooley, 1993; Walker, 1996). The leaves are used to heal sores (Bryant, 1966) and used as an ingredient in purgative parasiticides and stomach complaints. Roots are used as an ingredient for pleurisy sufferers, infertility and impotency. Root bark is used as an ingredient in blood purifying concoctions known as *iMbhiza* and is taken orally or used as steam bath for scrofula and as an enema for stomach complaints. The roots are used for sharp pains in the chest (Gerstner, 1938), as an ingredient for chronic coughs and for snakebite. Rootbark is applied for toothache and bark is used to treat paralysed limbs by being rubbed into incisions and patient sucks boiling bark decoction from finger tips and then taps affected joints. No similar Zulu uses could be found in the literature. Roots are used to treat toothache in Swaziland (Adeniji et al., 1998).
79. *Ziziphus mucronata* Willd. (Rhamnaceae); *umHlalankosi;* [BMC162]; [DSC101]	*umHlahlankosi* [RH]*; umLahlankosi* [R]*; umPhafa* [RH]*; imBhufa* [R]*; umHlalabantu* [R]	GM/TN: A twig of the plant is taken on the journey to fetch the spirit of a deceased person. SF: The leaf is put on a wound to pull out a thorn.[b] T: The fruit is eaten.	Used for medicinal and magical purposes and has toxic characteristics (Hutchings et al., 1996; Pooley, 1993).The bark is used as emetics for chronic coughs (Bryant, 1966). Leaves and bark are used for respiratory ailments (Watt and Breyer-Brandwijk, 1962) and steam baths from the bark are used to purify the complexion (Palmer and Pitman, 1972b). Roots are used for toothache and scrofula and leaves are used for boils and glandular swellings (Doke and Vilikazi, 1972; Palmer and Pitman, 1972b). The branches are used to attract ancestral spirits from an old dwelling site to a new one and are placed on the graves of chiefs and heads of kraals after burial and fed to cattle the same evening so the cattle will imbibe the spirit of the dead owner.
80. Unidentified species*;* *umThandelo*		SF: When two wives are fighting, it is used to create peace in the household.	
81. Unidentified species; *amaHlozi* (*Cnetis* species*?*)		TN/SM: The leaves are dried and powdered for use as snuff.	
82. Unidentified species; *umTumbula*		TN/SM: The root is boiled and eaten like potato.	

purgatives and a few of them required that a mixture of plant species be used.

4. Conclusions

The new medicinal plant uses and vernacular names are valuable contributions to the Zulu ethnobotanical record. The confirmation of some of the known uses and the elaboration of uses of well-documented species are also of value in providing a more complete insight into the patterns of plant use in KwaNibela and in KwaZulu-Natal as a whole. No link between Swazi traditional uses or vernacular names and those of KwaNibela could be established to corroborate the verbal accounts of the KwaNibela people having migrated from Swaziland.

The new species records and new uses of both well-documented and poorly recorded species revealed in this study indicate that the ethnobotanical knowledge of the Zulu ethnic group in Maputaland is incompletely recorded. It is imperative that traditional knowledge systems from relatively isolated populations within South Africa are documented in an attempt to preserve indigenous plant knowledge before it is lost to a changing world.

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