

EARLY RECORDS OF SOME FLORA AND FAUNA USED BY THE KHOISAN OF THE WESTERN CAPE*

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ABSTRACT

A rare document in the the South African Museum provides eyewitness information on the use of a number of species of flora and fauna by the Khoikhoi and San inhabitants of the western part of South Africa during the late seventeenth century. The information provided relates to the use of the various species for food, medicine and equipment, and is supplemented by information from two eighteenth-century botanists as well as modern information.

INTRODUCTION

The library of the South African Museum has a document that is extremely rare and, in some respects, unique. It is generally known as the *Codex Witsenii* or Witsen's Codex. However, use of the name for this volume alone is not strictly correct, since it is but one of a set of three volumes to which the name was given (Burman 1738:vi *et seq.*). It is a bound collection of 87 coloured drawings, all but one of which relate to the expedition undertaken in 1685-6 by Simon van der Stel, Commander of the Dutch East India Company's (VOC) settlement on the shore of Table Bay. The purpose of the expedition was to locate the 'Copper Mountains' in the country of the Namaqua, which were said to be the source of all the copper possessed by the indigenous inhabitants of the land (Moodie 1960:398).

As well as a journal being kept of the expedition, drawings were made of some of the flora and fauna encountered along the route. They are considered to be the work of Heinrich (Hendrik) Claudius, an apothecary and artist who was a member of Van der Stel's expedition. Because of his professional interest, Claudius annotated them with information about their pharmacological and/or dietary properties, this probably having been obtained from the Khoikhoi; and he also included many of the indigenous names.

The original of the journal and its accompanying drawings disappeared from the VOC's archives, possibly towards the end of the seventeenth century, but are believed to be those now in the library of Trinity College, Dublin. These have been published in two editions (Waterhouse 1932; De Wet & Pheiffer 1979). The illustrations in the South African Museum's volume were made at the Cape in 1692 for Nicolaas Witsen, a

wealthy citizen of Amsterdam who was one of the Directors of the VOC and a Trustee of the *Hortus Medicus* in Amsterdam, in which plants from all over the known world were cultivated. What is known of the history of this volume and the other collections of similar drawings has been detailed elsewhere (Waterhouse 1932; Barnard 1947; Kennedy 1967; De Wet & Pheiffer 1979; Wilson 1989; Kerkham 1992a, 1992b). Each of the collections differs in the number and nature of the drawings it contains, and the annotations of many of them differ, so that each is in some respects unique. Apart from the Dublin drawings, the identity of the artists who made the other collections is unknown, but the source of all of them is clearly the Claudius originals, not all of which are in the Dublin collection.

As far as is known, no publication relating to these collections has dealt with the ethnographic data. This information can be useful to archaeologists, who may find in their excavations the remains of the species discussed below or, where these have not survived, can use the information to expand their knowledge of the economy of the Khoisan. In this connection it should be borne in mind that, although the species described were found in the western part of the country, many of them have a wider distribution, and that similar species of the same genera were probably used in other parts of the country.

The use or vernacular name of many of the species is ascribed to the Khoikhoi: the Grigriqua, who lived between the Berg and Olifants Rivers; and/or the (Little) Namaqua, whose territory lay between the Olifants and Orange Rivers. The Sunqua (San) referred to in folio 148 were widely distributed and the 'Cape people' also mentioned there were probably the Goringhiqua, the 'Kaapmans' of the early records, and possibly their

neighbours, the Gorachouqua and Cochoqua.

The expedition took place between 25 August 1685 and 26 January 1686. All the species recorded were thus observed between early spring and midsummer. A single plant (folio 70, not discussed here), was recorded as having been found by Van der Stel on 30 January 1686 on the Steenberg, on the False Bay side of the Cape Peninsula.

The descriptions below are preceded by the folio number of the illustration in the Museum's volume and information is provided from the annotation on the reverse of the drawing. These are followed by the identification of the species and such other information as is available. The information extracted from Watt & Breyer-Brandwijk (1962) is mostly derived from other, primary, sources but these authors are cited here as being the source. Since not all of the illustrations are reproduced here (Fig. 1), cross-references to those in the collection of Trinity College, Dublin (Waterhouse 1932, De Wet & Pheiffer 1979), the catalogue of paintings in the Africana Museum, Johannesburg (Kennedy 1967) and the collection of the South African Library, Cape Town (Kerkham 1992a, 1992b) are provided for the benefit of readers who have access to these publications. TCD followed by a number refers to the folio in Waterhouse and De Wet & Pheiffer, K plus number to the catalogue reference in Kennedy, and SAL plus letter and number to the South African Library collection. In cases where the indigenous name given in the other collections differs from that in the Museum's volume, the variant is given in brackets after the collection reference. A complete (black-and-white) set of the illustrations in the Museum's volume is to be found in Barnard (1947).

FLORA

9. The root of this plant has a pleasant taste, is carminative [relieves flatulence] and diuretic [causes an increased output of urine] and much used by the inhabitants, who call it *chamare*. The leaves have the smell of parsley.
Possibly *Peucedanum gummiferum* (L.) Wijnands (Apiaceae) showing tuber and basal leaves. About a century later, Thunberg (Forbes ed. 1986:202) recorded that the root of a similar plant, called *gli* by the inhabitants, was dried and powdered, then mixed with cold water and honey and allowed to ferment overnight, after which it produced an intoxicating liquor. Watt & Breyer-Brandwijk (1962:1038, 1041) cited a report that *Glia gummifera* was used in South Africa as a diuretic in treating dropsy and lithiasis (kidney- and gallstones), and another of the medicinal use of *P. tenuifolium*, which apparently blisters the skin. The last two scientific names have been revised to *Peucedanum gummiferum* (Gibbs Russell *et al.* 1987:139-140). Note that the indigenous name has been used for the genus name of the plant illustrated in folio 63. Common names: gli(wortel); moerwortel, yeast root, the latter indicating the use of the root as
- a yeast or fermenting agent (Smith 1966:230). TCD811, K637, SALB28.
13. This plant is filled with brack, sourish sap that is useful - in direst necessity - for slaking thirst, but its use results in severe stomach-ache. It grows mostly in the country of the Namaqua.
Conophytum sp., probably *C. minutum* (Haw.) N.E. Br. (Mesembryanthemaceae). Watt & Breyer-Brandwijk (1962:6) reported that Louis Leipoldt, poet, writer and medical doctor, considered that this genus has narcotic properties. Common name: not known for this species. K644.
15. This is the second kind of the *gambry* of the Hottentots, but unfit to use. (See 55 below for the first kind.)
Ornithogalum suaveolens Jacq. (Liliaceae). Common names: geeltjienkerintjie, yellow chinchinchee (Smith 1966:225); also geelviooltjie, yellow violet (Bond & Goldblatt 1984:55). K638.
19. The flower of this plant has a pleasant smell and it [the plant rather than just the flower] is calefacient [produces or causes a sensation of warmth] and suitable for poultices. Called *cabaroe* by the inhabitants.
Steirodiscus tagetes (L.) Schltr. (Asteraceae). Common name: Smith (1966:184, 263) gave only cabaroe and kaberoe, names derived from the annotations. K614.
27. This plant has an edible root and is called *heyntame*.
Pelargonium barklyi Scott Elliott (Geraniaceae). Watt & Breyer-Brandwijk (1962:453) reported the use of a number of *Pelargonium* species in the treatment of various diseases and Thunberg (Forbes ed. 1986:160), and dysentery. Common name: not known for this species, but the name malva, mallow, is generally applied to the genus (Smith 1966:331). K601. observed that the tubers, being of an astringent nature, were used in the treatment of diarrhoea
37. The roasted bulb of this plant has a sweet and pleasant taste and is a common food of the inhabitants, but eating much of it causes severe constipation.
Babiana tubulosa (Burm. f.) Ker-Gawl. (Iridaceae). Common names: bobbejaantjie, little baboon, or bobbejaanuintjie, baboon's little onion (Smith 1966:133, 135). TCD835, K628, SALB4.
43. The bulb of this sweet-scented flower has a pleasant if somewhat astringent taste. It is a common food of the inhabitants and they call it *cabung*.
Lapeirousia pyramidalis (Lam.) Goldblatt (Iridaceae). Common name: Bond & Goldblatt (1984:77) gave this as naeltjie, clove, and applied

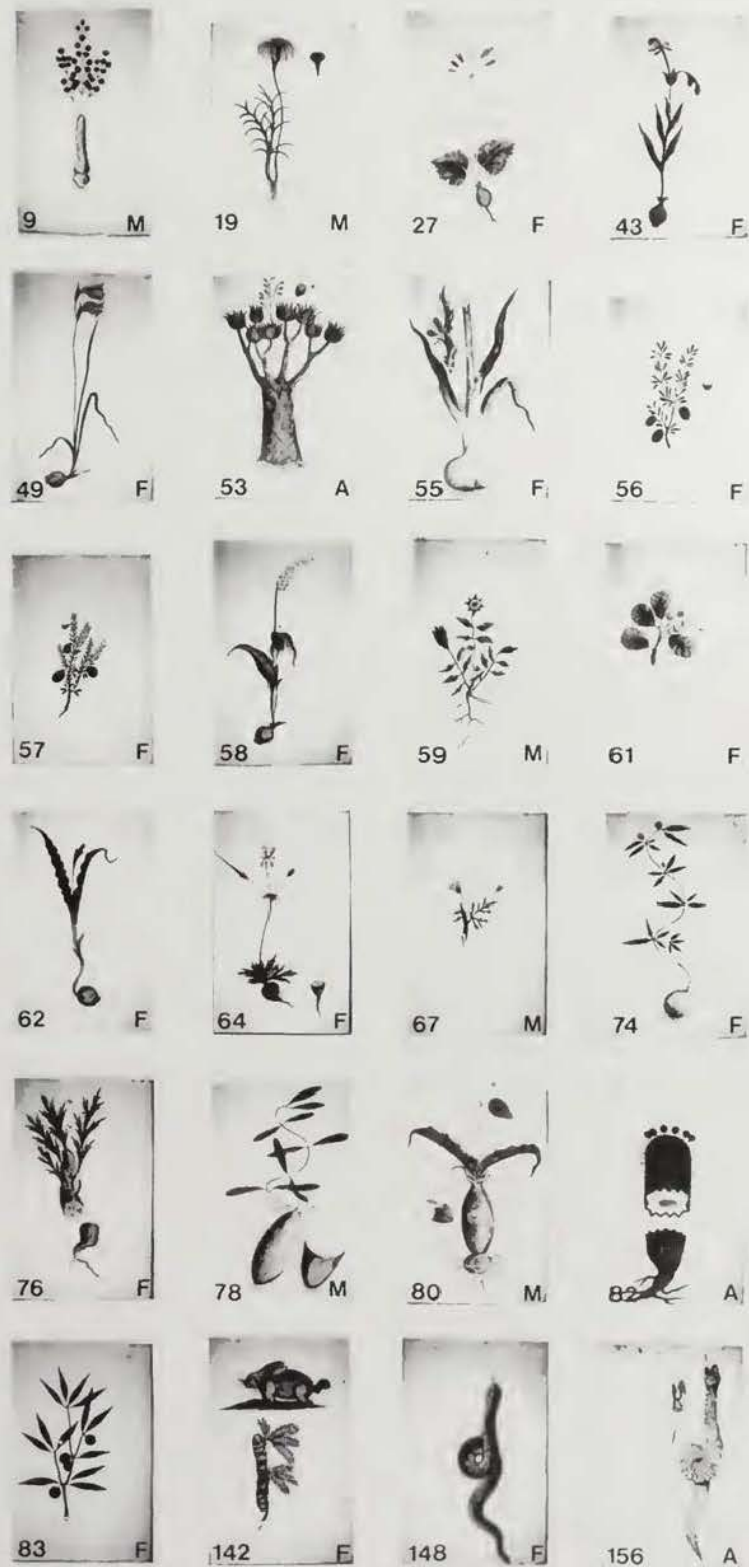


Fig. 1. Twenty-four of the flora and fauna discussed. The number in the lower left corner is that of the folio. The letter in the lower right corner indicates the use of the species for food (F), medicine (M) or artifacts (A).

the names *cabong* and *chabi* to *L. fabricii*, whereas Smith (1966:184, 190) applied them to *L. anceps*. TCD785 (*Chabi*), K627 (*Chabung*), SALB35.

49. The root is edible.

Gladiolus caryophyllaceus (Burm. f.) Poir. (Iridaceae). Common names: sandlelie, sand lily; pink afrikaner (Bond & Goldblatt 1984:69). TCD801, K608, SALB17.

53. The spongy pith of the branches of this tree is removed and the hollowed-out bark used by the inhabitants for quivers, a piece of leather being drawn over one end. Called *choje* by the inhabitants.

Aloe dichotoma Masson (Liliaceae). Common names: the use to which the branches were put has given rise to the Afrikaans and English vernacular names *kokerboom* and *quiver tree* (Coates Palgrave 1977:78). TCD799, K595, SALB23.

55. The stem of this plant is filled with sweetish sap and is chewed by the inhabitants when they are thirsty, as it has a wonderful ability to cool and freshen the mouth. The inhabitants call it *gambry*.

Albuca altissima Dryander (Liliaceae). Note that this differs from 15 above although it has the same Khoikhoi name. Thunberg (Forbes ed. 1986:57) also recorded the use of another species, *A. maior* (= *A. canadensis*: Gibbs Russell et al. 1985:101) as a thirst-quencher. Common names: Smith (1966:538) gave *maerman*, *thin man*, as the common name for this plant, but under this heading (p. 328) applied it to *Urginea altissima* (L.f.) Bok. Elsewhere (pp. 218, 424), he applied the indigenous name, *gambry*, to *A. canadensis*, which is also known as *slymstok*, *slime-stick*, with reference to the qualities mentioned above. Le Roux & Schelpe (1981:30) gave the common names of *A. altissima* as *slymstok* and *kamiemie*, the latter evidently of Khoisan origin. TCD849, K625, SALB14.

56. The fruit of this plant looks and tastes like the Indian fruit *kauki* [persimmon], but is constipating and eating too much of it obstructs the bowels. It is called *kannobe* by the inhabitants.

Diospyros austro-africana De Winter (Ebenaceae). Watt & Breyer-Brandwijk (1962:393) cited a report that the Nama used *Royena hirsuta* [= *D. austro-africana*: Gibbs Russell et al. 1987:149] as a purgative, which is contradictory of the effects mentioned above. Common names: *fire-sticks*, *kritikom*, the former referring to use of twigs to make fire by friction, the latter probably a Khoisan name (Coates Palgrave 1977:744). See also 83 below. TCD833, K618, SALB31.

57. The fruit of this plant has a pleasant, if some what tart, taste. Healthy and cooling, it is useful for travellers to freshen their mouths and quench

their thirst. Called *cargoe* by the inhabitants.

Nylandtia spinosa (L.) Dumort. (Polygalaceae). Folio 31 illustrates this species with flowers but without fruit. Common names: *bokbessie*, *goat berry*; *skilpadbessie*, *tortoise berry*; *duinebessie*, *dune berry* (Bond & Goldblatt 1984:361). TCD865, K619, SALB19.

58. The bulb from which this flower grows has a sweet and pleasant taste when baked in the ashes. The inhabitants call it *chaby*, and it serves them as a common food.

Wurmbea spicata (Burm. f.) Dur. & Schinz (Liliaceae). Common names: *swartkoppie*, *little blackhead*; *peper-en-soutblommetjie*, *pepper-and-salt flower* (Smith 1966:366), the latter apparently in allusion to the flower colour. TCD839, K624, SALB1.

59. This is *kanna*, renowned among the Namaqua and other peoples in the area on account of its intoxicant properties. It is chewed daily by the people and has a pleasant and cordial taste. It grows only on certain mountains in Namaqualand and is collected in October.

Sceletium sp., probably *S. regium* L. Bol. (Mesembryanthemaceae). Thunberg (Forbes ed. 1986:248) described how a shrub, called *kon* by the Hottentots and *canna* by the colonists (sic), was famous all over the country and was traded over great distances. The root, stalk, and leaves were pounded, then twisted like 'pig-tail tobacco', allowed to ferment and then kept as a thirst-quencher, although if chewed immediately after fermentation, it intoxicated. Common name: not known for this species, but *kanna* and *kougoed*, chewing matter, have been applied to other species (Smith 1966:276, 309). TCD787, K631, SALB27.

61. The berries of this plant are edible to some extent but are not healthy, especially if too many of them are eaten and water drunk thereafter, since this causes acute stomach-ache. The plant is found in many places and is called *chou* by the inhabitants.

Heeria argentea (Thunb.) Meisn. (Anacardiaceae). Common name: *kliphout*, *rockwood* (Bond & Goldblatt 1984:138). TCD819 (thou), K620, SALB30.

62. This plant, found in certain valleys along the Piketberg, has a sweet and edible root.

Anomatheca viridis (Aiton) Goldblatt (Iridaceae). Common name: *groenagretjie*, *green mayflower* (Bond & Goldblatt 1984:59). K623.

63. The root of this plant, like a type of carrot, has a pleasant smell and is an effective carminative. It grows in dry, sandy places in the country of the Grigriqua.

Possibly *Chamarea capensis* (Thunb.) Ecklon &

Zeyher (Apiaceae). Watt & Breyer-Brandwijk (1962:1036) cited a report that this plant was heated and applied externally to relieve pain; also that it was not used internally as a medicine but eaten as a food, and that the root is soapy. Note that the indigenous name for the plant illustrated in folio 9 has now become the genus name of the plant illustrated here. Common names: Cape caraway; finkelwortel, fennel root (Bond & Goldblatt 1984:142). K605.

64. The root of this plant is sweet and much eaten by the inhabitants. It is found in many places and is called *heyntame* by the Namaqua, *aree* by the Grigriqua.

Pelargonium incrassatum (Andr.) Sims (Geraniaceae). Van der Walt & Vorster (1981:79-80) reported that this species is restricted to a narrow strip along the western Cape coast, from the Spektakel Pass west of Springbok to the Nardouw Flats east of Klaver. The wide distribution mentioned by the annotator may refer to tuberous *Pelargonium* spp. in general, rather than indicating that the distribution of *P. incrassatum* is now more restricted than in the past. It is leafless, thus invisible, during the summer. Common names: Namaqualand Beauty (Van der Walt & Vorster 1981:79-80); t'neitjie (Le Roux & Schelpe 1981:98), probably a Khoisan name. TCD869, K602, SALB25.

67. This shrub has a sweet smell and is useful for making poultices in the event of cramps.

Othonna leptodactyla Harv. (Asteraceae). Common name: not known for this species. K641.

69. The root or bulb of this plant, which is called *haro* by the inhabitants, has a sweet and pleasant taste.

Moraea fugax (Delaroché) Jacq. (Iridaceae). Watt & Breyer-Brandwijk (1962:510) reported that the taste is like that of a boiled chestnut, but Thunberg (Forbes 1986:55) thought they tasted like potatoes. Common name: uintjie, little onion, a name given to a wide range of plants with bulbs, corms or tubers, particularly species of Iridaceae and Cyperaceae (Smith 1966:473). TCD797, K610, SALB36.

74. The root of this plant has a sweet and pleasant, though watery, taste and can provide the inhabitants with a daily food. It grows in some places in the country of the Namaqua, who call it *berroe*.

Cyphia digitata (Thunb.) Willd. (Lobeliaceae). See also below for a different species illustrated by Burman. Thunberg (Forbes ed. 1986:251) stated that a plant called *kameka* or *barup*, 'which is said to be a large and watery root', was one of several means employed by the Hottentots when traversing the Karoo 'not only to assuage their hunger, but more particularly to quench their thirst'. Common name: baroe or variant spellings, often with a prefix such

as berg-, mountain, melk-, milk, etc. (Smith 1966:616). TCD831, K652.

76. The root and stem of this plant, roasted in the fire, are pleasant to eat. It was found in many places in the country of the Namaqua, who eat it as a common food all year round and call it *thumma*.

Pelargonium carnosum (L.) L'Hér. (Geraniaceae). Common name: fleshy-stalked pelargonium (Van der Walt 1977:8), simply a translation of the scientific name. TCD793, K653, SALB16.

78. This plant is found in many places, but particularly between the Olifants and Doornbosch [= Groen] rivers. The inhabitants hold it in great esteem and eat it as a diuretic. The Namaqua call it *camarebi* and the Grigriqua *camao*.

Fockea edulis (Thunb.) K. Schum. (Asclepiadaceae). Watt & Breyer-Brandwijk (1962:133) cited a nineteenth-century report that the tuber was eaten raw by the Hottentots. Thunberg (Forbes ed. 1986:250, 274) stated that this was one of several plants used by the Hottentots as a source of food and water; also that they ground it to meal and baked it like bread. Common name: kamb(a)roo (Smith 1966:272). Thunberg (*loc. cit.*) gave the common names *ku* and *Kou*, the latter called 'a Hottentot watermelon'. These names are either corruptions or dialectal variants of the Khoikhoi names given in the Dutch annotation. TCD825, K622, SALB12.

79. An edible gladiolus.

Gladiolus equitans Thunb. (Iridaceae). Common name: kalkoentjie, little turkey. This name is applied to several species of Iridaceae and alludes to the colour of the flowers (Smith 1966:270-271). TCD829, K609.

80. This plant grows in the vicinity of Meerhoffkasteel and is used successfully by the inhabitants as a purgative. It is called *quaroebe* by the Namaqua and Grigriqua.

Veltheimia capensis (L.) DC. (Liliaceae). Common name: sandlelie, sand lily (Le Roux & Schelpe 1981:28). TCD789, K612, SALB22.

81. The brittle and soft stem of this geranium has a sweet and pleasant taste. The inhabitants eat it, and call it *cabouti*. It was found between Oloffberghfontein and the Dassenberg [= Heerenloegement].

Pelargonium echinatum Curtis (Geraniaceae). Common names: bobbejaan t'neitjie (Le Roux & Schelpe 1981:96), the latter part probably a Khoisan name applied to *Pelargonium* spp. in general - see folio 64; also prickly-stemmed pelargonium (Van der Walt 1977:13). TCD827, K600, SALB15.

82. This unusual plant is found in the vicinity of the Copper Mountains. The inhabitants call it *tkauby* and use its sap as an adhesive, with which to glue together their arrows and quivers.

Euphorbia stellispina Haw. (Euphorbiaceae). Common name: noorsdoring, ill-tempered thorn, referring to the spiny nature of the stems of several species of *Euphorbia* (Smith 1966:352). TCD851, K607, SALB7. See Wilson (1992) for comment on previous incorrect translations of the annotation.

83. The fruit of this plant are pleasant to eat, although exceedingly astringent. They are called *Baviaens kerse* [baboons' cherries] by the Dutch.

Probably *Diospyros acocksii* (De Winter) De Winter (Ebenaceae). Common name: Namakwajakkalsbessie, Namaqua jackal-berry (Coates Palgrave 1977:743). TCD847, K645, SALB8.

FAUNA

- 142 (upper). This kind of wild rabbit is found in the vicinity of the Copper Mountains. It has a pleasant taste and is called nabasse by the inhabitants. Smith's red rock rabbit *Pronolagus rupestris* (Leporidae), a nocturnal species (Skinner & Smithers 1990:176-7). TCD735, K665, SAL Z2.

- 142 (lower). This caterpillar, after the contents of its gut have been squeezed out, is put on wooden skewers and roasted on the coals, or it is cooked without water in a pot, after which the liquid is squeezed out and the remainder made into balls and eaten. It is considered a particular delicacy by the Namaqua, who call it *aroebe*. (The annotation also mentions that the people customarily ate red and green grasshoppers.)

Larva of the willowtree (or zig-zag) emperor moth *Gonimbrasia tyrreha* (Saturniidae). In the winter-rainfall region, the larva appears in late spring or early summer and is available for about two months before it pupates (V.B. Whitehead pers. comm. 1993). Cross-references as above. A better-known relative, the 'mopane worm', is the larva of *G. belina* (Pinhey 1972:79).

148. This snake is eaten with great relish by the Sunqua, who call it *keykaras*, while the Cape people call it *cabcou*.

Mole snake *Pseudaspis cana* (Colubridae). TCD773, K671. Folio 146 (upper) illustrates what appears to be a juvenile of this species, but it is called *thoumquete* by the Namaqua and *eyerimate* by the Grigriqua, both tribes considering it vicious and poisonous. *P. cana* is not venomous, but can inflict a serious bite. TCD775, K670 (centre).

156. The venom of these snakes, which the inhabitants call *hamachou*, is used by them to poison the tips of their

arrows and spears after it has been dried and sliced into pieces. (The illustration shows how the venom sac is removed and its end tied off, this also being described in the annotation.)

Cape cobra *Naja nivea* (Elapidae). TCD777, K672 (right).

THE [DECADES] RARIORUM AFRICANARUM PLANTARUM

Johannes Burman (1707-1779), a medical doctor and Professor of Botany at the Hortus Medicus in Amsterdam, acquired the three volumes of the *Codex Witsenii* from the widowed daughter-in-law of his predecessor, Caspar Commelin, after the latter's death in 1731. He made extensive use of the Codex in his monograph on Cape flora (Burman 1738-9). Although he annotated the Museum's volume with references to his own work and that of other botanists, of the 92 references to the *Codex* in his monograph, only twelve refer to the Museum volume: folios 9, 13, 17, 19, 25, 27, 39 and 63-67.

As will be seen from the foregoing, not all the illustrations in the Museum's volume are of flora used by the Khoikhoi. There are, however, other references to such use in the *Decades*, information on these having been taken from the other two volumes of the *Codex Witsenii*, one of which is in the library of the National Botanical Institute, Pretoria, while the location of the third is not known, or from another source. Those given below list the number of the *Decas*, plate, figure, and page. Burman gave the *Codex Witsenii* as the source of his information for all the plants except the first.

3.25.1.61. Eaten by the inhabitants for their agreeable taste and commonly called *Ficus Hottentotorum* [Hottentots' fig].

Carpobrotus edulis (L.) L. Bol. (Mesembryanthemaceae). Common name: suurvy, sour fig (Bond & Goldblatt 1984:320).

3.27.3.67. The bulb is eaten by the Hottentots.

Oxalis purpurea L. (Oxalidaceae). Common name: not known for this species, but the name suring, sorrel, is applied to many species of this genus (Smith 1966:446).

4.38.2.99. The bulb is eaten by the Hottentots.

Cyphia bulbosa (L.) Berg. (Lobeliaceae). Common name: bergbaroe, mountain baroe (Bond & Goldblatt 1984:211). See folio 74 above for another species.

9.82.1.235-6. It is called the *Assagay-Boom* [-tree]... from which the Khoikhoi make sarissas or assegais. *Curtisia dentata* (Burm. f.) C.A. Sm. (Cornaceae).

9.83.1.237. Commonly called *Slangenhou* [snakewood]. Surgeons in the Cape of Good Hope use the root to evacuate serous fluids.

Olea exasperata Jacq. (Oleaceae). Possibly a use derived from the Khoikhoi. Smith (1966:422) said that the name derives from the belief that the root was an antidote for snake-bite (see also Coates Palgrave 1977:760).

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