OF THE SOUTH AFRICAN SUGAR INDUSTRY



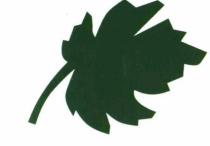














OF THE SOUTH AFRICAN SUGAR INDUSTRY

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CONTENTS

Introduction
Broadleaf weeds (green section)
Flat and low growing species
Erect and/or tall growing species
Creepers and vines
Trees
Grasses (yellow section)
Tufted grasses
Creeping grasses
Sedges (pink section)
Watergrasses
Index













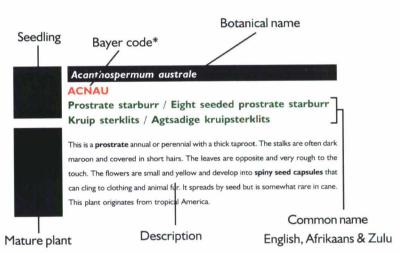
INTRODUCTION

The objective of this book is to provide the South African sugarcane grower with the means to identify weeds without the complication of botanical keys. It will also help the grower make better choices regarding weed control measures.

All the weed species that appear in the book were collected from cane fields throughout the South African sugar industry and, in most cases, each is shown at the seedling and mature stage of development. It must be appreciated that the list of weeds included is by no means complete and further species will appear in subsequent editions.

All photography and species descriptions were prepared at the Experiment Station. Staff at the National Botanical Institute Herbarium in Durban were responsible for identification. Below is a guide to how the book is formulated.





Note: Not all elements shown above are included for every weed.

The interactive weed code can be used in conjunction with the SASEX Herbicide Guide to identify appropriate application treatments.

Red codes that are followed by an asterisk (eg PSELA) are species that have not yet been allocated a weed code, and have been given a temporary code.





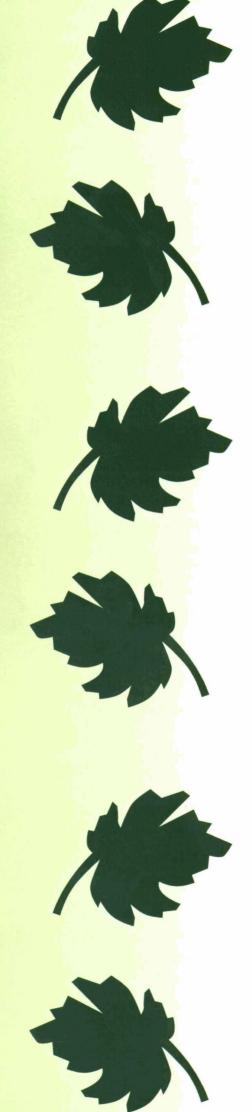
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The staff at SASEX for editing, photography, design and layout.





BROADLEAF WEEDS

Flat and Low Growing







Acanthospermum australe

ACNAU

Prostrate starburr / Eight seeded prostrate starburr Kruip sterklits / Agtsadige kruipsterklits

This is a **prostrate** annual or perennial with a thick taproot. The stalks are often dark maroon and covered in short hairs. The leaves are opposite and very rough to the touch. The flowers are small and yellow and develop into **spiny seed capsules** that can cling to clothing and animal fur. It spreads by seed but is somewhat rare in cane. This plant originates from tropical America.





Aizoon canariense

AIZCA*

Aizoon is a **prostrate**, **succulent-like plant** that has small yellow/green flowers that grow on stout branching stems. The leaves lie flat on the ground. It may be an annual or perennial weed which can form large mats if not controlled. It is rare in cane except in certain coastal areas where it seems to favour the sandy soils.



Potent	al Competitor in	Cane
LOW	MEDIUM	HIGH











Alternanthera pungens

ALRRE

Khakiweed / Paperthorn / Khaki burr weed Kakiedubbeltjie

This is a **prostrate** perennial that **forms mats**. It is very common in lawns on the coast and is only occasionally found in cane. It is a much branched species that has stems that are hairy and able to root from the nodes. It has small white flowers that grow in clusters, and it is the flower petals that become hard, sharp and **thornlike**. The plant is able to reproduce by both seed and stolons. It originates from South America.



Argemone mexicana

ARGME

Mexican poppy / Yellow flowered mexican poppy Meksikaanse papawer / Geelblom bloudissel

This is an annual species that can grow to 1 m. The stems are erect and produce a yellow juice when damaged. The flowers are **bright yellow** and develop in spring. Leaves are deeply lobed and have yellowish **prickles**. The fruit is a **spiny capsule** that contains many black seeds. This species only reproduces from seed. It is common on the coastal sandy soils but seldom a major problem in sugarcane. There are a few herbicides registered for use on this species. It is a native of South America.

Potential Competitor in Cane

LOW MEDIUM HIGH







Argemone subfusiformis ARGSU

Mexican poppy / White flowered mexican poppy Meksikaanse papawer / Witblom bloudissel

The white flowered mexican poppy is an annual species that can reach up to ± 0.9 m and has a very **long taproot**. The leaves are **hard with yellowish spines** and are **bluish/grey** in colour. The flowers are **pale yellow to creamy white** which distinguishes this species from Argemone mexicana which has a yellow flower and softer, greener leaves. The fruit is a **spiny capsule** and the plant reproduces by seeds that are very toxic. The rest of the plant is also toxic. All parts contain a **yellow juice**. This species originates from South America and, although not usually a serious pest in cane, can be very common on the sandy coastal soils.

Potent	ial Competitor in	Cane
LOW	MEDIUM	HIGH





Centella asiatica

CLLAS

Pennywort

Waternavel

A **prostrate creeping** perennial that spreads by stolons and seed. The leaves are **round** or **kidney-shaped** and have serrated or **scalloped margins**. They are attached to the stolons by long slender stalks and smell of **carrot** when crushed. This species does well under moist conditions and is very common in **lawns**. This species apparently has many medicinal properties and is seldom a major pest in canefields. It is normally easily controlled with hormone type herbicides. Its origin is possibly tropical Asia.

Potential Competitor in Cane		
2.7		
LOW	MEDIUM	HIGH





Chamaesyce hirta

EPHHI

Red milkweed Rooimelkkruid

This is usually an upright to prostrate annual with stems that can grow to 0,4m in length. Leaves are opposite and serrated, and are dark green to red-brown with a reddish tinge. Flowers are pinkish/green in round clusters between pairs of leaves. **All parts produce a milky latex** that can irritate the skin. Reproduces from seed. Is often present in cane fields but normally not a major problem. Originates in the tropics and can have poisonous properties.



Chamaesyce inaequilatera

EPHIN* Smooth creeping milkweed

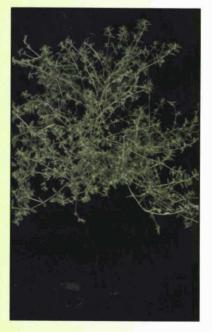
Gladde kruipmelkkruid

This is a small flat growing, many branched annual, that produces a **milky latex** when damaged. The branches can become semi-erect and stand up to 0,3m when the plant is mature. The leaves are small, rounded, smooth and are attached to stems that are often reddish in colour. The **flowers are very small** and yellowish in colour. This species is indigenous, propagates by seed and can develop into mats of up to 0,5m in diameter. It is common in cane fields and has also become a troublesome lawn weed.

Potential Competitor in Cane		
LOW	MEDIUM	HIGH











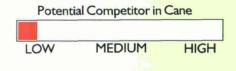


Chamaesyce prostrata

EPHPT

Hairy creeping milkweed Harige kruipmelkkruid

This is a **prostrate** annual with **many branches** radiating from the crown. The stems and leaves are **hairy**, **often red** and all parts produce a **milky latex**. The leaves are opposite and have a blue/green colour with pink edges. Reproduction is by seed. It is distinguished from *Chamaesyce inaequilatera* by the latter's smoothness. This species does not compete strongly with cane and has even been known to be encouraged to form thick mats to reduce evaporation in young ratoons. It is native to tropical and subtropical America.







Chenopodium carinatum

CHEPU

Green goosefoot

Groenhondebossie

Green goosefoot is an annual weed with flat growing stems that turn up at the ends. Branches arise from the base of the plant and each can be up to 0,6m long. The leaves are sometimes as wide as they are long, toothed, and **strongly aromatic** when crushed. The flowers are small and green and are produced in the leaf axils. It reproduces by seed only. It is not a strong competitor with cane as it is low growing. This species originates from Australia.

Potential Competitor in Cane







Commelina benghalensis

Benghal wandering jew / Wandering jew Benghalse wandelende jood / Wandelende jood

A **sprawling**, many branched, semi-creeping annual with all parts producing a **sticky sap**. The **flowers are blue** and the whole plant is covered in soft hairs. Can reproduce by section as well as seed that can be produced both above and below the ground. The underground seed may be at varying depths, which results in the species germinating at different times. This species may have rhizomes and is an important sugarcane weed. It is extremely widespread in the industry but there are many products registered for its control. This species may be indigenous to South Africa.

Potenti	al Competitor in	Cane
LOW	MEDIUM	HIGH

Commelina erecta

COMER

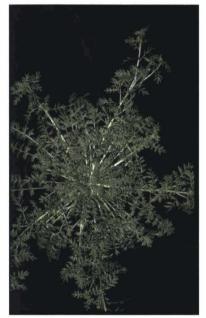
This is an erect or sprawling perennial **succulent** plant that has a **slimy sap**. It roots readily from the nodes and can spread in this manner. The flowers are **dark blue**. It is found mainly on the sandy coastal soils as well as in wet habitats. This species is not as common as *Commelina benghalensis* in sugarcane.



Potential Competitor in Cane		
LOW	MEDIUM	HIGH







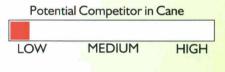
Coronopus didymus

COPDI

Carrot weed / Swinecress

Peperkruid

Carrot weed is an annual or biennial herb. The young plants have a **flat rosettelike appearance** with leaves that are wider at the tips. Mature plants can form mats 0,8m across and can reach up to 0,4m in height. The species is multistemmed from the base and each stem usually rises up at the end. The leaves are divided up into narrow segments. The flowers are very small and are green to yellow/white in colour. Propagation is by seed. This plant is not usually a major weed problem in sugarcane. It originates from Europe and Asia.





Desmodium incanum

DEDCA

This is an attractive legume that has variegated leaves and pink pea-like flowers. It produces segmented **seed pods that are extremely rough and sticky** which makes them **adhere to clothing and fur**. This weed can become woody with age. It is common in lawns and is only occasionally found in cane fields.



Potential Competitor in Cane



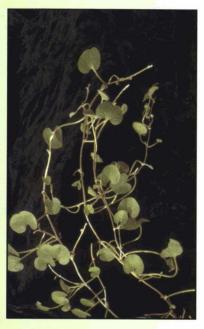


Dichondra repens

DIORE

Wonder lawn

A flat growing small perennial **creeper** with nodes that can root. It produces very small yellow/green flowers. Reproduction is via seed and stolons. The leaves are alternate, rounded and kidney shaped. Very common in lawns but seldom found in sugarcane fields. This species is probably indigenous to southern Africa.











Drimiopsis maculata

DRIMA*

This is a bulbous plant with lily-like features. The leaves are very fleshy and contain a sticky latex when broken. The leaves, and sometimes petioles, often have attractive blotches that gives the aerial parts a speckled appearance. Flowers are whitish and are located in groups at the tops of long stalks. The bulbs go purple when exposed to light. Common in the Emoyeni district in Zululand and appears to prefer the sandier soils of the industry.

Potential Competitor in Cane

LOW MEDIUM HIGH







Emex australis

EMEAU

Spiny emex

Emex-dubbeltjie / Kaapsedubbeltjie

The plant is a prostrate to semi-erect annual with **large, smooth leaves** that are rounded at the tips. The flowers are small and green and are found in the leaf axils. This plant has triangular fruits with **sharp spines (Devil's Thorn)**, and reproduction is from seed only. It is very common on the **sandy coastal soils**. The species is low growing and is not a serious competitor with cane. It usually grows in small patches that eventually dry up in late summer. This is an indigenous species.

Potentia	Competitor in	Cane
LOW	MEDIUM	HIGH



Gnaphalium coarctatum

GNACO*

This is usually a **woolly**, prostrate, **rosette shaped** plant with **silvery/grey** blunt leaves. The flowers are papery and are found at the ends of branches. This is not an important cane weed but can be a pest in lawns.



Potenti	al Competitor in	Cane
LOW	MEDIUM	HIGH











Gomphrena celosioides GOMCE

Prostrate globe amaranth Kruip-knopamarant

Prostrate globe amaranth is a prostrate perennial with **red to green stems**. The leaves are oval and opposite and are hairy on the undersides, but can become smooth when older. The white, rounded flowers are **stiff and scale-like** and are located at the ends of branches. The weed propagates from seed and can be fairly common in cane fields. It originates from South America.

Potenti	al Competitor in	Cane
LOW	MEDIUM	HIGH

Hibiscus trionum

HIBTR

Bladder hibiscus / Bladder weed

Terblansbossie

This weed is an annual herb that can grow erect to about 1,5m, but can also be sprawling and climbing. The stems are branched from the base and are covered in **stiff bristles**. The leaves are **deeply lobed** (3-5) and are attached by **long bristly petioles**. The flowers are cream to yellow with distinct purple centres and arise from the leaf axils. The flower opens for a few hours only. On maturity, bladder-like fruits develop and the species reproduces by seed. It is very common but usually not very troublesome in cane. It is a native of Asia but may also be indigenous to southern Africa.







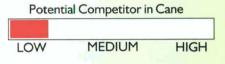




Hypochoeris brasiliensis HRYBR

Cat's ear

Cat's ear is a perennial that grows as a **rosette**, with older leaves flat and younger leaves more erect. The entire plant has a **lettuce-like appearance**. The leaves are mainly smooth, but have hair-like projections on the midribs and on the leaf margins. Leaf margins range from having slight, to very deep lobes. It is common in cane, but due to its low growth habit, is not a strong competitor with the crop. The plant propagates from seed and has become very widespread in lawns and gardens. It is indigenous to South America.



Hypochoeris radicata

HRYRA

Spotted cat's ear / Hairy wild lettuce Skaapslaai / Harige skaapslaai

This is a stemless, **rosette shaped** perennial with a thick taproot. The first leaves that emerge are flat, while the upper leaves are semi-erect. The **leaves have deep lobes and are covered in soft white hairs**. The **flowers are bright yellow**. This weed spreads by seed only. It is a common weed in cane, but due to it's low growth habit, is not a strong competitor with the crop. It is very widespread in lawns and gardens, and originates from the Mediterranean region.



Pote	ential Competitor in	Cane
LOW	MEDIUM	HIGH







ANDSP

This plant is **prostrate** and has a thick perennial rootstock, flattened stems and the leaves are small. It is seldom found in cane, but is common on verges and grassed farm roads where the **red flowers** make it very conspicuous. It can be a serious invader in lawns.







Lactuca capensis

LACCP

This is an erect perennial weed that has a rosette shape when young. It reproduces from seed and is usually found in low numbers in sugarcane fields. *L. capensis* is indigenous to southern Africa.



Potential Competitor in Cane

LOW MEDIUM HIGH











Lactuca indica

LACIN

This is a leafy annual weed that grows in a **rosette pattern** and has a **lettucelike appearance**. The leaves can reach 200mm in length and have a colour range from green to purple, with strongly lobed edges. The flowers are yellow. The plant reproduces from seed, is common in the coastal areas but is seldom found in large numbers in cane fields.

Potential	Competitor in	Cane
LOW	MEDIUM	HIGH

Lactuca serriola

LACSE

Wild lettuce

Wilde slaai

This is an annual or perennial, bluish green plant that can grow to a height of 2m. All parts exude a **milky juice** when damaged. The leaves at the base are twisted and prostrate and stems can be prickly on the lower portion. The seedlings have leaves that have **sharp spines** on the underside of the midribs. This plant produces many creamy yellow flower heads that are the **only part of the plant to have branches**. It also has a very **thick fleshy taproot** even when young. It is often difficult to control with herbicides. It propagates from seed but is not regarded as an important cane weed. It is a native of Europe and Asia.

Potential Competitor in Cane

MEDIUM

LOW

HIGH





Melilotus indica

MEUIN

Annual yellow sweet clover Eenjarige geelstinkklaver

This is a **clover-like weed** that has typical **tri-foliate leaves** with **red midribs** when young. The leaves are rounded but eventually elongate and become slightly serrated. The plant becomes a slender bush on maturity. The flowers are pale yellow, very small and are grouped on catkins. This weed has appeared in irrigated sugarcane fields in Mpumalanga.

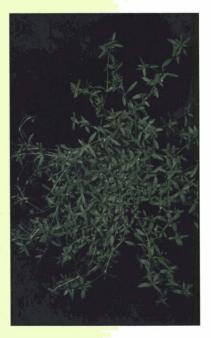
Potentia	al Competitor in	Cane
LOW	MEDIUM	HIGH



Oldenlandia corymbasa

OLDCO*

This is a flat growing, small attractive plant that has **minute white flowers**. The leaves are small and opposite and have a strong odour when crushed. This weed is not a problem in cane but can be troublesome in **lawns**.



Potential Competitor in Cane		
LOW	MEDIUM	HIGH









Oxalis corniculata

Creeping sorrel Tuinranksuring

ΟΧΑCO

This species can either be an annual or perennial weed. It spreads by **prostrate** stolons that root at the nodes and turn up at the ends. It also spreads by seeding. Leaves have the typical three **clover-like leaflets** and are usually pale green, but can also sometimes be reddish in colour. Flowers are **small and yellow** and form oblong seed pods that explode to disperse seeds over a wide area. This species has no underground bulbs and is very common in lawns. It is seldom an important sugarcane pest and occurs only where heavy weed pressure is allowed to develop. Originates from Europe and Asia.

ial Competitor in	Cane
MEDIUM	HIGH

Oxalis latifolia

OXALA

Red garden sorrel Rooituinsuring

A stemless perennial with a fleshy taproot, this plant grows only to approximately 0,25m. The flowers are showy and are **pink to mauve**. The leaves are made up of three leaflets with the typical **clover appearance**. It has underground bulbs from which it propagates. It can also reproduce by seed. It is indigenous to South America and is not regarded as a major problem in sugarcane in South Africa.







Oxalis semiloba

OXASE* Transvaal sorrel Transvaalse suring Isunungu

An erect perennial weed that has aerial parts that die back annually. Reproduction is by seed, bulbs and rhizomes. It is common in the Midlands but is not a serious cane weed. The species is indigenous to southern Africa.



Physalis viscosa

PHYVI

Sticky gooseberry Klewerige appelliefie

This is an erect to decumbent perennial that usually does not reach more than 0,3m in height. The leaves are thick, tough, have a **pale yellow/green** colour, and feel somewhat **sticky** when handled. The flowers are yellow and form typical **gooseberry-shaped capsules** when mature. This weed spreads mainly by rhizomes but also by seed and can invade large areas in a field. Because of the extensive underground rhizome system, this species is very **difficult to control** by hand or with herbicides. *Physalis viscosa* is a serious competitor with sugarcane and every effort should be made to eradicate it. It originates from South America.





Potential Competitor in Cane

And a second	the state of the s	
LOW	MEDIUM	HIGH







Plantago major PLAMA

Ripple-seed plantain / Broad-leaved ribwort Breëblaar plantago / Grootweëblaar Indlede-ka-tekwane

Plantago major is an annual or perennial herbaceous **stemless species that grows** in a squat rosette. The root system is fibrous. The mature leaves are rounded with very **prominent ribs** that converge at the base and apex. Leaves also have wavy margins and are attached by long broad leaf stalks. Flowers are greenishwhite and are attached on **long stems** (\pm 30mm). The plant reproduces by seed and is sometimes common in the coastal areas. It is not considered to be a major problem in sugarcane. Native to Europe, Asia and possibly North America.

Potenti	al Competitor in	Cane
LOW	MEDIUM	HIGH





Portulaca oleracea POROL Common purslane / Purslane Gewone poslein

Lenjana

Purslane is a **prostrate annual succulent herb** with radiating branches. Stems are red. Leaves are smooth, shiny, opposite, **teardrop** in shape and are often clustered at the ends of branches. Flowers are small and yellow. Normally reproduces from seed (10 000/plant recorded) but can survive long dry periods and reroot after cultivation. Edible and used as a pig feed, but leaves can accumulate toxins that are dangerous to livestock. Very widespread and considered one of the world's worst weeds. Very common in the irrigated areas of this industry. Usually well controlled by herbicides. It is a native of Western Asia.

Potential Competitor in Cane		
LOW	MEDIUM	HIGH











Richardia brasiliensis

RCHBR

Tropical richardia

Tropiese richardia

A **flat growing** perennial herb with many hairy branches. Stems and leaves are covered in soft hairs. Flowers are white with a cast of blue and appear in dense clusters. Leaves are opposite, without leaf stalks and cling directly onto the stems. Reproduction is by seed only. This species is very common but will only become a problem in neglected fields where weeds have become well established. There are a lot of products registered for the control of *R. brasiliensis*. Native to Central America.

Potential Competitor in Cane		
LOW	MEDIUM	HIGH



This is a perennial species that has **strap-like leaves** that radiate upwards from a central point. The leaves often fold under at the margins. The plant can reach 1 m in height. **Flower heads are large** and the species propagates from both seed and root sections. This species is uncommon in cane fields. It is a native of Europe and Asia.

Potenti	al Competitor in	Cane
LOW	MEDIUM	HIGH







Sisymbrium thellingii SSYTH

Common wild mustard Gewone wildemosterd

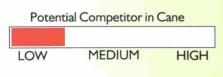
An erect annual or biennial plant with **very rough leaves and stems**. The flowers are yellow and it reproduces from seeds that develop in **long narrow pods**. This species is native to South Africa and is often found on the sandy coastal soils. It does not usually occur in large enough numbers to be troublesome in cane fields.

Potential Competitor in Cane		
LOW	MEDIUM	HIGH

Spilanthes decumbens

SPIDE*

This is a smallish daisy-like, mat forming plant that is common in irrigated cane fields in the Tala Valley area. It has yellow flowers and all parts of the plant are smooth.







Stellaria media

STEME

Chickweed

Gewone sterremuur / Sterrmuur

This is a small, weak, much branched green stemmed annual succulent that often forms mats. **Stems are also weak**. The upper leaves do not have petioles. The flowers are white and showy and appear at the ends of stalks. This plant can be toxic to livestock. It reproduces by both seed and stolon and is often troublesome in lawns. It is never found in large numbers in cane fields. The species originates in Eurasia.



Taraxacum breviscapum

TAROF

Common dandelion

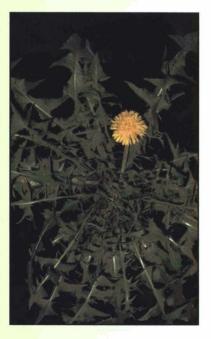
Perdeblom

This is a prostrate, stemless perennial with a radiating **rosette growth habit**. The **leaves are deeply lobed** with the terminal lobe larger than the others. Leaves are edible, are light green and have purple petioles. The **flowers are bright yellow** and are attached to long **hollow stalks**. **All parts have a milky white latex** when broken. The plant propagates by seed that forms a conspicuous round fluffy ball that breaks up to disperse the parachuted seed by wind. It is common in cane fields but is a weak competitor with sugarcane. It is very common in gardens and is native to Eurasia.

Potential Competitor in Cane		
LOW	MEDIUM	HIGH













Tribulis terrestris

TRBTE

Common dubbeltjie Gewone dubbeltjie

Dubbeltjie is a prostrate annual or perennial that can form **mats** of up to Im in width. The plant has a deep taproot. The leaves are **pinnate** and are hairy and rough to the touch. The flowers are small, **bright yellow** and develop in the leaf axils. The fruit is a spined capsule that is **burr-like** (dubbeltjies). It spreads mainly by seed. Stock can get tribulosis (geeldikkop) from this plant, which causes the skin of sheep to become light sensitive. As it is low growing, it does not compete significantly with cane. It is thought to have originated in Southern Europe but could also be indigenous to southern Africa.

Potenti	al Competitor in	Cane
LOW	MEDIUM	HIGH





Tridax procumbens TRQPR

Daisy / Tridax daisy

Aster

This is an annual weed that has **symmetrical** growth with leaves and branches having opposite neighbours. **Leaves are extremely rough** and almost prickly. All other parts of the plant have short stiff hairs. The flowers are white with yellow centres and are situated at the ends of long stalks. Seeds have tufts that act as parachutes that enable the plant to disperse over large distances. Reproduction is by both seed and stolons. It is not a common weed in sugarcane and is usually found on road verges. The species originates from Central America.

Potential Comp <mark>etitor in Cane</mark>		
LOW	MEDIUM	HIGH











Youngia japonica UOUJA

Native hawk's bird

This is a smallish, erect growing annual with radiating, soft-lobed leaves that **contain a milky latex**. The leaves are situated at the base only, and often have brownish borders when older. The **flowers are small**, **bright yellow**, **and form dandelion-like heads on long slender stalks**. Reproduction is by seed that is dispersed by wind. It is common but not a serious weed in sugarcane. It is very often found in lawns and driveways. It is native to Japan and north-western India.



Zaleya pentandra

ZAPEN*

African purslane

Muisvygie

This is a succulent-like, perennial, prostrate plant with **all parts smooth**. The **leaves are thick and fleshy and have distinct dark purple margins**. The undersides of the leaves are a much lighter green than the upper surfaces. The flower is small and predominantly white with a pink tinge. This is a common weed in irrigated sugarcane in Mpumalanga.



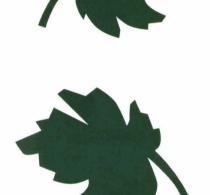






BROADLEAF

Erect and/or Tall Growing











Acalypha ecklonii

ACCEK

This is an erect to semi-prostrate plant that can have an annual or biennial life cycle. The plant's growth habit and low populations make it a weak competitor with cane. It reproduces from seeds and is indigenous to southern Africa.









Ageratum conyzoides

AGECO

Invading ageratum / Billy-goat weed Indringer-ageratum

An annual herb that has erect, hairy stems that can reach I m in height. **Flowers are blue** and are clustered at the ends of stems. Leaves are opposite and are **very aromatic** when crushed. Reproduces from seed that is mainly dispersed by wind. This species can be very troublesome in cane due to high numbers and rapid growth. From tropical America.

Potential Competitor in Cane









Amaranthus hybridus

AMACH

Cape pigweed Kaapse misbredie Imbuya

This is a **tall** erect branched annual with ribbed stems that can have a red coloration. The flowers are a green/yellow colour and are on **long slender spikes** (catkins up to 150mm long) that distinguish this from the other *Amaranthus* species. Flowers are also found in the axils of the leaves. Leaves are oval to oblong and have wavy edges that may be notched with mottled red coloration on the undersides when young. The stems of young plants are often deep red. This plant spreads by seed and is eaten as a spinach. It is widespread and fairly common in cane. It is a native of tropical America.

Potenti	al Competitor in	Cane
LOW	MEDIUM	HIGH





Amaranthus spinosus

AMASP

Thorny pigweed

Doringmisbredie

Thorny pigweed is an upright annual growing to 0,9m. Usually has many branches with **pairs of spines** where leaf petioles meet the stem. Stems are furrowed. Flowers are greenish/straw coloured and occur in clusters in the forks of leaves. Leaves are alternate and have a short pointed tip. The species reproduces from seed, is edible and is used as spinach. It can be troublesome in cane but is easily controlled with herbicides. It comes from tropical America.

Potential Competitor in Cane

MEDIUM

LOW

HIGH



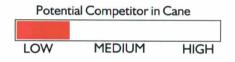


Amaranthus thunbergii

AMATH

Red pigweed Rooimisbredie Imbuya

A **flat** to sub-erect and sometimes sprawling annual with a height of up to 0,6m. It has furrowed, angled stems and small **greenish flowers** in clusters at the branch ends and in leaf axils. Leaves are broad at the tip and narrow at the base. It is indigenous to South Africa and is used as a spinach. The species spreads by seed only and is not considered to be a major sugarcane weed.



Amaranthus viridis

AMAVI

Slender amaranth / Pigweed

Skraal misbredie

A perennial with **slender stems** that can be erect or prostrate, but usually **spread close to the ground**. Leaves are ovate on long petioles. Flowers are yellow/ green and are in bundles. Reproduces from seed only. Found in most tropical countries but originates from Europe and Asia.



Potential Competitor in Cane

LOW MEDIUM HIGH













Ambroisia artemisiifolia

Annual ragweed / Common ragweed

This is a branching upright annual that can reach 1m in height. The stems and leaves are covered in fine hairs that cause the undersides of leaves to appear **grey**. The **leaves are also much divided**. Flowers are yellow/green, small and arranged on **long racemes**. The male flower hangs down from the tips of branches while the female flower stands upright and is located in the leaf axils. The weed spreads by seed that can remain viable in the soil for many years. It can be common on the sandy coastal soils where it may compete successfully with cane if allowed to develop. It originates in the western hemisphere.

Potential Competitor in Cane		
LOW	MEDIUM	HIGH

Asclepias physocarpa ASCPH*

Milkweed

Balbos

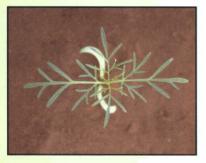
This is an upright, tall growing plant that can reach 1,5m, with distinctive **pale yellow stems**. The leaves are glossy green and long. The flowers develop as small club-like structures that open into white showy flowers that hang in loose bunches. The seed pods develop into **large air-filled bags** that are rounded and covered in hair-like structures (*Asclepias fruticosa* fruit has pointed ends). All parts produce a **milky latex** when cut. This species is toxic. It is seldom found in large numbers in sugarcane fields, and is more common on roadsides and disturbed areas.

Potential Competitor in Cane			
LOW	MEDIUM	HIGH	











Bidens bipinnata

BIDBI

Spanish blackjack

Spaanse knapsekêrel

Spanish blackjack is an erect annual that has a **square stem** that can reach 1,2m in height. The leaves are compound. Flower heads are orange coloured and are borne singly at the ends of long branches. This species reproduces from seed which clings to clothing and hair, and the young plants are edible. It can be a serious weed in cane in the KwaZulu-Natal Midlands, and is native to North America or Eurasia.



Bidens formosa

BIDFO

Cosmos

Kosmos

Cosmos is an erect annual that can grow to 1,5m in height. The flowers are **very showy** with colours that vary from **pink to white**, and occasionally dark purple. The leaves are deeply divided. It is common in the Midlands of the industry but is not regarded as a major problem in sugarcane fields. It is very noticeable **along roadsides** during March and April, as the flowers form an attractive, highly coloured border. It originates from North America.

Potential Competitor in Cane		
LOW	MEDIUM	HIGH







Bidens pilosa BIDPI

Common blackjack Gewone knapsekêrel Ugadolo

An upright annual with **square, ribbed stems** that can reach 1 m in height. Stems are usually smooth and striped. Flowers are yellow to white and seeds develop in **black radiating clusters**. Reproduces from seed that **sticks to clothing**, etc, and can germinate very rapidly. Leaves are **tri-foliate** with serrated margins and are edible. Can be a major weed pest in sugarcane. Is usually an **early germinator** and is one of the first species to emerge in the Midlands. This is a major broadleaf weed in cane and can occur as homogenous stands if not controlled. Many herbicides are registered for this species. Native to tropical America.

Potentia	al Competitor in	Cane
LOW	MEDIUM	HIGH

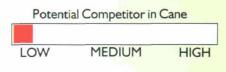




Cannabis sativa CNISA Indian hemp / Dagga Dagga

Nsangu

Dagga is an erect branched annual herb that can reach a considerable height. The stems are ribbed and rough to the touch. **The leaves are divided into radiating leaflets (usually five)**. The flowers are small and crowded towards the ends of branches, with male and female on separate plants. Reproduction is by seed. The first true seedling leaves are very distinct. Man uses this species as a source of marijuana and hemp fibres, but is illegal to propagate. However, seedlings are sometimes found where labour have worked. Dagga is never a problem in cane due to the demand for the plant. This species is exotic and originates in Europe and Asia.







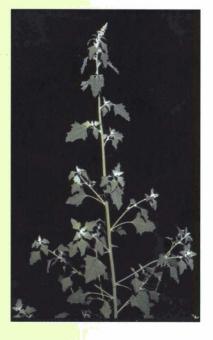
Chamaesyce hypericifolia

EPHHS

This is a weak sprawling to upright plant that produces a **milky latex** if damaged. The leaves are oval, opposite and have a powdery appearance. This species is not regarded as an important sugarcane weed.







Potential Competitor in Cane

Chenopodium album CHEAL White goosefoot Withondebossie

Umbikicane

White goosefoot is an annual species where the mature plant has one upright stem that can grow to 1,5m in height. The plant has a strong tap root. The **leaves are usually 1,5 times as long as wide,** with the **lower leaves distinctly goosefoot** in shape. Stems are whitish with green ribs that can also have a reddish tinge. Seedling leaves are dull green on the upper surfaces and are **powdery** and **purple on the undersides**. The flowers are small, greenish, powdery and are arranged in clusters. The young plant is edible and the species makes a good livestock feed. The seed can be also be ground into an edible flour. The crushed plant has a **distinct smell**. Reproduces from seed (500 000/plant recorded) that can remain dormant for a very long time. Hence it is one of the world's most successful plant colonisers. The seed germinates near the mother plant and the species is often found in patches that can result in serious competition with cane if allowed to grow tall. Originates from Europe and Asia.



Potential Competitor in Cane











Ciclospermum leptophyllum

APULE

Wild celery Wilde seldery

Small hollow stemmed annual seldom above 0,6m tall. Plant is very branched and dark green with small white flowers. Leaves are alternate, very narrow, needle like and are branched with a **carrot top appearance**. Reproduces from seed. This species originates in the Americas and is not regarded as an important weed in sugarcane in South Africa. Only a few products are registered for its control.



Circium vulgare

CIRVU

Scotch thistle / Spear thistle Skotse dissel / Speerdissel

A rosette shaped biennial plant with a strong taproot. The rosette shape gives way to an upright growth habit in the second year. Leaves are covered in spines that are large at the margins and smaller on the leaf surfaces. Leaves are deeply lobed and lack smell. The flowers are mauve, scale like, and develop spiny seed capsules. Several flower heads can develop on each plant. This weed propagates from seeds that have silky plumes for wind dispersal. Can also regenerate from root sections, eg after ploughing. Very common in the Midlands where it can be troublesome, especially when it becomes large. It originated in Europe and Western Asia, but is now found world-wide.

Potential Competitor in Cane

MEDIUM

LOW

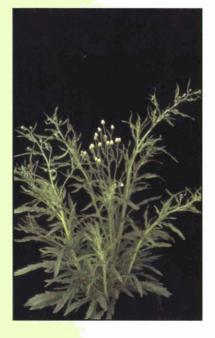
HIGH











Cleome monophylla

CLEMO

Single-leafed cleome / Spindlepod Enkelblaar cleome / Rusperbossie

This is a small, erect, branched annual that usually grows to 0,6m. The leaves are **long, narrow**, dull green and are sometimes used as a spinach. The leaves have very prominent veining and are attached by **long petioles**. The flowers are pink to mauve in colour. The stem is ribbed, covered with hairs and feels sticky to the touch. The seed pods are about 100mm long, have **dense hairs** and sometimes point upwards. This plant reproduces by seed and is often found in **patches** that can enable it to compete with cane if allowed to grow tall. This species is indigenous to southern Africa.



Conyza bonariensis

ERIBO

Flax-leaf fleabane

Kleinskraalhans

This weed is an erect annual that can grow to $\pm 1,2m$ in height. A distinguishing feature is the many branches that are **longer than the main stem**. The leaves are alternate, have a soft felt-like appearance when young, may have a fine toothed edge and are edible. The flowers are small and creamy white and are found in bunches at the **ends of the branches**. The plant reproduces from parachute-like seed which is windborne. Heavy infestations can be a problem in cane if allowed to grow tall. This weed becomes woody and if stands are thick can disrupt infield operations. It is native to the tropical regions of South America and elsewhere.









Conyza floribunda

ERIFL

Tall fleabane

Vaalskraalhans

An upright and **usually unbranched** annual. It has small flower heads on **short branches**, with the flowers becoming **brown** with age (and not pale on long branches like *Conyza bonariensis*). The leaves are edible. This species only reproduces from seed and can become a serious problem in sugarcane especially if allowed to become woody and survive into the cooler months. There are many products available for the control of *Conyza* species. This species originates from South America.

Potenti	al Competitor in	Cane
LOW	MEDIUM	HIGH

Corchorus trilocularis

CORDI*

This is an erect annual that is sometimes found in cane fields but is more common on field verges and roadsides. The species reproduces by seed and is a native of Asia and Europe.



Potential Competitor in Cane











Crassocephalum crepidioides

This is an upright, multi-stemmed, annual that can reach a height of Im. The stems are ribbed and support alternating leaves with serrated margins and lamellae that reach down to the stalk (petiolate). The leaves are rough to the touch. The **flowers are mauve to orange** and are arranged **in clusters that sometimes droop down**. Fine **fluffy hairs** appear when the flower matures, which enables seed to be dispersed by wind. This is the only method of propagation and the plant is usually in low numbers in cane fields. It is thought to be indigenous to southern Africa.



Datura stromonium

DATST

Common thorn apple / Thorn apple Gewone stinkblaar / Stinkblaar

lloqi

This is an annual plant that can grow to 1,5m and has green to purple stems that are repeatedly forked. The leaves are large with irregularly toothed margins and have a **very distinct unpleasant smell** when crushed. The flowers are white or mauve, solitary, **trumpet shaped** and form **spiny pods** with four segments that contain many brown **kidney shaped seeds** (*Datura ferox* has much larger spines on the seed pods). Seeds are a source of the drug hyoscyamine (sedative and hypnotic) and the entire plant is toxic. It propagates from seeds but is usually not in large enough numbers to become problematic in cane. It originates in Asia or North America.







Didymodoxa caffra

DIDCA*

This plant forms a small to medium well rounded, many branched bush. The leaves are nettle-like and are a soft pale yellow/green. The flowers are insignificant and occur in the leaf axils. This weed is usually found in low numbers in cane fields.







Potential Competitor in Cane		
LOW	MEDIUM	HIGH

Eclipta prostrata

ECLAL

Eclipta

Eclipta

Eclipta is a weak stemmed annual that is often found lying down. The stems and leaves have short rough hairs and the flowers are a whitish colour. It reproduces by seed, is common in very **damp areas** and is not abundant in cane fields. It originates from Europe and Asia but has now spread to many tropical and temperate regions.

Potential Competitor in Cane

MEDIUM

LOW









Euphorbia cyathophora EPHCT

This is a tall, upright species that is often found in homogenous stands. The petioles and stems have a covering of soft hairs, and the leaves are distinctly **shield shaped** and have a smooth soft texture. All parts of the plant produce a **milky latex** when damaged. This weed has become extremely common in sugarcane fields in the **Mpumalanga lowveld**, where control with chemicals is usually ineffective.

Potential Competitor in Cane		
	MEDIUM	
LOW	PIEDION	HIGH

Euphorbia heterophylla

EPHHL

Painted euphorbia

Gekleurde euphorbia

Painted euphorbia is an annual or biennial **Poinsettia-like species** that can grow to 1m. **Some of the upper leaves are red at the base and resemble flowers. All parts exude a milky latex when damaged**. The species spreads by seed and originates from North America.

Potential Competitor in Cane		
LOW	MEDIUM	HIGH







Flavaria bidentis

FLABI

Smelter's bush Smeltersbossie

Smelter's bush is an erect annual that can grow up to 0,9m. It has striated stems with a colour range from deep maroon to green in streaks. Leaves are opposite off the main stalk with new shoots coming from the leaf axils. The plant has a very **symmetrical** appearance. **Leaves are smooth, have shallow serrations and possess three almost parallel leaf veins** that are very distinct on the undersides. The flowers are yellow, small and found in dense heads at the ends of branches and in the leaf axils. This weed spreads by seed and seedlings can form dense stands, but mature plants are usually sparse. It is a fairly common species in cane fields, but populations are seldom very high. Is a native of South America.

Potenti	al Competitor in	Cane
LOW	MEDIUM	HIGH





Galinsoga parviflora

GASPS

Small-flowered quick weed / Gallant soldier Knopkruid

An upright, **slender**, branching annual herb that can grow to 0,5m. Has ribbed **weak stems**. Leaves are soft, opposite, slightly scalloped, yellow/green, pointed at the tips and have three prominent veins from the base. Flowers are **yellow** and small. This species spreads by seed but is not an important weed in sugarcane. Originates from tropical America.

Potential Competitor in Cane









Gladiolus dalenii

GLADA*

This is a tall stemmed perennial that can grow to 0,9m in height. It has tough **strap-like leaves** and **striking orange to red flowers** (December to April). The flowering stems can reach 1,0-1,5m in height and are edible. The plant has become a localised problem in some cane fields in the Mount Edgecombe, Verulam and Tongaat areas.

Potenti	al Competitor in	Cane
LOW	MEDIUM	HIGH

Gnaphalium pensylvanicum

GNAPE

Roerkruid

This is an annual that can be either sprawling or erect. The young plants are rosette shaped when viewed from above. The leaves are **silvery grey** and the whole plant has a somewhat **woolly appearance**. The flowers are papery and are situated at the ends of branches. The species reproduces from seed and can form dense stands which may become troublesome in cane. It is a native of North America.









Helichrysum cooperi

HELCO*

Geelsewejaartjie

This is a tall growing perennial species that has many branches that radiate from an upright main stem. The stems are covered in stiff, purple hairs when mature. All leaves are soft and covered in down-like hairs, and are strongly aromatic when crushed. The flowers are bright yellow, and are found in clusters at the tops of the plant. Flowers are crisp to the touch and are similar to the group commonly known as "everlastings". Helichrysum species have many medicinal uses. They are usually found in low numbers in cane at higher altitudes. This is an indigenous species.

Potent	ial Competitor in	Cane
LOW	MEDIUM	HIGH







Helichrysum ruderale

HELRU*

This is a tall growing species with many branches and an upright main stem. All leaves are soft and covered in down-like hairs, and are strongly aromatic when crushed. The flowers are bright yellow and are found in clusters at the tops of the plant. They are crisp to the touch and are similar to the "everlastings". It is indigenous and is not usually found in large numbers in sugarcane fields.



LOW

MEDIUM





Hibiscus cannabinus

HIBCA

Kenaf

Wildestokroos

This is an erect annual that has **stiff prickles on the stems and petioles** (*H.trionum is* more prostrate and lacks prickles). The leaves are oval towards the base and become more lobed higher up. The flowers appear in the leaf axils, are white/ yellow with very deep purple centres and are shortlived. It spreads by seed alone and is not usually very troublesome in cane. It is most likely an exotic species.



Ilysanthes dubia

This is an annual plant that can have an erect or decumbent growth habit. The **whole plant has a distinct smooth and glossy appearance.** The **stems are quadrangular** and rooting can take place from the lower nodes. Is often found on the sandy coastal soils but is normally not in high enough numbers to be considered an important sugarcane weed.













i de la

Indigofera parviflora

Woolly finger bush Wolvingerbossie

This is an erect annual with small pink to mauve flowers on or close to the stem. It reproduces from seed but is not found in large numbers in cane fields. It is indigenous to southern Africa.

Potential Competitor in Cane		
1.014		
LOW	MEDIUM	HIGH

Lepidium africanum

LEPAF

Pepper cress

Peperbossie

This is an erect annual or biennial indigenous species that usually grows to a height of 0,45m. The flowers are very small and in long racemes. The seed is small, **cup shaped** and arranged evenly along the upper stems. Reproduces from seed but not regarded as a common sugarcane weed.



Potential Competitor in Cane
LOW MEDIUM HIGH







Lepidium bonariensis

LEPBO

Birdseed / Pepper cress / Pepperweed Peperbossie

This is a small, erect, branched annual or biennial weed. The fruits are small, **oval cupped discs** that are arranged on racemes. It differs from *Lepidium africanum* in having stouter seed heads and more hairs on the leaves. It spreads by seed but is not an important cane weed. It is indigenous to South America.

Potential Competitor in Cane		
	MEDILIM	
LOW	MEDIUM	HIGH

Lepidium virginicum

LEPVI

This is not a serious weed in cane.



Potential Competitor in Cane

LOW MEDIUM HIGH





Malvastrum coromandelianum

MAVCO

Prickly malvastrum

This is a woody species that can grow to 0,6m. The flowers are yellow/orange in colour and the leaves are alternate with **distinct serrations**. It propagates from seed but is usually only found in cane if the weed infestation is very heavy. It is normally more common on field verges etc. Originates in the tropics.







Potential Competitor in Cane		
LOW	MEDIUM	HIGH

Mirabilis jalapa

MIBJA

Marvel of Peru / Four o'clock Vieruurblom / Vieruurtjie

Marvel of Peru is an erect branching perennial that can grow to Im. The stems and branches are smooth and greenish. It is possible to find **different coloured flowers on the same plant**. Flowers are very colourful and can be striped and even mottled. It is self-seeding and can also propagate by means of tuberous roots. The seeds and roots are poisonous. It is native to Mexico and has only been found on rare occasions in cane fields in South Africa.

Potential Competitor in Cane











Nicandra physaloides

NICPH

Apple of Peru

Basterappelliefie

Apple of Peru is a stout annual that can reach 1,5m in height. It has **fluted hollow stems** with many branches. The leaves are wavy with coarsely toothed margins. Flowers are blue to white, **bell shaped**, single and are attached to leaf axils. The fruit is **gooseberry-like** but is non-edible. The species is common in cane fields, reproduces by seed but is usually in low numbers. It originated from South America and is thought to be poisonous.



Nothoscordum gracile

NOTGR*

False garlic

The seedlings of this weed are onion-like, with very slender, stringy leaves. The plant develops long stalks that support multiple flower heads. The flowers radiate from the stalk ends, are white and very highly scented. The flowers give rise to small black seeds. The whole plant has a very slight onion smell when crushed. It has been known to form fairly dense stands in small sugarcane, but is not expected to compete strongly with the crop. It is reportedly a native of North and South America.







Oenothera parodiana

OENPA*

An erect to sprawling perennial that reproduces from seed. It is a native of South America and is not an important sugarcane weed. It can be common on the coastal sands.







Potential Comp <mark>etitor in Cane</mark>		
LOW	MEDIUM	HIGH

Parthinium histerophorus

PTNHY

Demoina weed

Demoinabossie

This is an erect perennial that can reach up to 2m in height. The plant usually is very branched and has **strongly ribbed stems**. The leaves are **deeply divided** and the flowers are small and white and are carried in clusters at the tops of plants (similar to *Gypsophelia* species). This species reproduces by seed and is able to survive in **low rainfall** areas such as the Mpumalanga lowveld and Swaziland. Infestations increased dramatically in the irrigated northern areas after the Demoina floods in 1984, when it became a serious pest in sugarcane. It is also known to invade disturbed natural areas in the semi-arid region of the industry. It is a native of North America.

Potential Competitor in Cane

LOW MEDIUM





Phyllanthus burchellii

PYLBU*

This is a small weak annual weed that only reaches about 0,15m in height. It **branches from the base** and the **stems are grooved** and smooth. The leaves are oval to oblong and the flowers hang down from the stems. It is a small weed that is usually not found in large enough numbers to compete seriously with sugarcane.







Phyllanthus meyerianus

PYLME*

This is a weak upright to sub-erect plant with **oval leaves** that are arranged **pinnately**. The flowers hang down from the stems that are smooth. This plant can form a rhizome from which it may spread, but it is not regarded as an important sugarcane weed.



Potential Competitor in Cane		
LOW	MEDIUM	HIGH







Physalis angulata

PHYAN Wild gooseberry

Wilde appelliefie

Erect gooseberry-like annual that has angled and grooved stems with purple tingeing. Flowers are small and situated in the leaf axils on slender stalks. The flower is pale yellow with a mauve center. Leaves alternate and deeply toothed at the margins. The fruit has the typical **gooseberry** appearance. Not a major cane weed.





Phytolacca octandra

PHTOC

Inkberry

Inkbessie



Inkberry is a tall, branched, shortlived perennial that can reach 3m in height. Many sideshoots occur from the leaf axils. All parts are light green but stems can be red, and the leaves are smooth and hairless. Flowers are green and appear as cat's tails that develop into **bunches of multi-segmented green berries that become black when ripe.** The berries produce an ink-like juice when crushed and the species is said to be poisonous. Seeds are spread widely by birds and water. This is a common weed in the Midlands but seldom becomes troublesome in cane. The species originates in tropical America.

Potential Competitor in Cane

LOW

MEDIUM





Pseudognaphalium luteo-album

Jersey cudweed Roerkruid Mgilane

PSELA*

This is an upright, **greyish** annual with soft, **stemless** leaves that are rounded at the ends and **covered in a soft down**. The leaves have a distinct smell when crushed. The **flowers are yellow** and similar to that of "everlastings". This species is often multi-stemmed and propagates by seed. It most likely originates from Europe and Asia.

Potenti	al Competitor in	Cane
LOW	MEDIUM	HIGH







Ricinus communis RIICO Castor-oil plant Kasterolieboom

Umhlakuva

Castor-oil plant is an exotic, branched, perennial shrub that can grow into a small tree with **hollow branches**. The leaves are opposite and **reddish when young**. On maturity they are large with 5-9 lobes and are on long petioles that **join the leaf near the centre.** The flowers are crowded at the tops of the plants. The fruits are three lobed, green, **round and spiny** becoming brown on maturity. The fruit can explode to disperse seed when ripe. Propagation is only by seeds which are shiny, mottled silver, brown and black and are highly toxic. The plant can cause poisoning in both animals and humans. This plant is cultivated as an oil crop in some countries, and has both industrial and medicinal uses. It is not usually found in large numbers in sugarcane, but can become a serious competitor if not controlled.



Potential Competitor in Cane

LOW	MEDIUM	HIGH







Schkuhria pinnata

SCKPI

Dwarf marigold Kleinkakiebos

This is a small upright delicate annual with stems branching from a central point. The plant can reach 0,6m in height. The leaves are deeply divided and **needlelike**. It has small yellow flowers that are carried on slender stalks that are grouped at the ends of the branches. It spreads by seed and is not regarded as a serious weed in sugarcane. It originates from South America.



Senecio madagascarensis

SENMA*

Groot senecio

This is a smooth annual plant that normally grows to 0,3m in height. The species is usually very branched from the upper section of the main stem only. The leaves are narrow, have toothed margins and are sparse. The flowers are small and bright yellow. This plant is usually very common on the coast but can occur in all other cane areas and can become serious if not controlled. It originates from the Argentine.

Potential Competitor in Cane

MEDIUM

LOW





Senecio polyanthemoides

SENPO*

This species has leaves that are **very dark green above** and **silvery below** due to dense hairs. Long stalks support flower heads that are made up of many small yellow flowers. This weed is seldom in dense enough stands to become a major problem in sugarcane.







Potential Competitor in Cane		
8.00		
LOW	MEDIUM	HIGH

Sesbania bispinosa

SEBCA

Spiny sesbania

Stekelsesbania

Spiny sesbania is an erect annual and sometimes bi-annual species. **Most parts of the plant are smooth** and the stem, which may have some prickles, has a **powdery appearance**. The leaves are distinctly rounded and grow from the main stem. The **flowers are yellow**, and develop into long seedpods that can be up to 150mm in length. The species spreads by seed but is not regarded as a serious weed in cane, except when in high populations. It is most probably a native of Europe and Asia.

Potential Competitor in Cane LOW MEDIUM HIGH









Sida alba

SIDSP

Spiny sida

Stekeltaaiman

Sida alba is an erect annual or perennial species that has semi-woody stems. Single or clustered pale yellow flowers develop **in the leaf axils**. The leaves are alternate and serrated. This weed reproduces from seed but is usually uncommon in sugarcane. This species may be indigenous to southern Africa.

Potentia	Competitor in	Cane
LOW	MEDIUM	HIGH

Sida rhombifolia

SIDRH

Pretoria sida / Arrowleaf sida Pretoria sida / Smalblaartaaiman

Pretoria sida is an indigenous **woody upright** annual or biennial with a deep taproot. The upper stems are dark purple but are green lower down. The flowers are pale yellow on **long thin stems** and arise from the leaf axils. The leaves are **serrated at the ends** and are alternately arranged and have short petioles. This plant reproduces by seed and can grow tall, competing with cane for light. Numbers in sugarcane fields are not usually high. The species comes from tropical and subtropical regions and is indigenous to southern Africa.

Potential Comp <mark>etitor in Cane</mark>		
MEDIUM	HIGH	









Siegesbeckia orientalis

SIKOR

Common St. Paul's wort / St. Paul's wort Gewone St. Paul's wort / Pauluskruid

This is a sturdy erect branching annual that can reach 1,2m in height. The stems are often tinged with purple. The leaves have irregular toothed edges. It produces sticky, **bright yellow**, daisy-like flowers and reproduction is by seed. This weed is normally found in too few numbers to be an important competitor with sugarcane. It comes from eastern Asia.

Potentia	al Competitor in	Cane
LOW	MEDIUM	HIGH

Solanum acanthoideum

SOLAC*

This Solanum develops into a heavily branched thorny shrub. The leaves are oval, thorny and have wavy margins. The fruit are conspicuous as they are large (± 25 mm diameter) and yellow on ripening. It is usually found only in low numbers and is therefore not regarded as a major sugarcane weed.



Potential Competitor in Cane		
LOW	MEDIUM	HIGH





Solanum nigrum

SOLNI

Black nightshade / Nightshade Nastergal Umsobosobo

This is an erect annual or biennial species. Older plants are **shrub-like** and can reach up to 1m. Stems and leaves are smooth but stems often have grooves. Leaves are opposite with **purplish colour to the undersides**, and blades that **run down on either side** of the leaf stalk. Flowers droop, are white to pale blue and are similar to those of the potato plant. Produces shiny berries that are poisonous when green but edible when **black**. Reproduces from seed. Black nightshade is very common in sugarcane areas but is well controlled by a range of herbicides. It is a native of Europe.

Potentia	al Competitor in	Cane
LOW	MEDIUM	HIGH





Solanum panduraeforme

SOLPA*

Bitter apple

Bitterappel

This is an upright branched perennial shrub that may or may not have thorns. The leaves are covered in **fine felt** and are therefore soft to the touch. Leaves may also have spines on the underside of the midrib. The **flowers are purple with yellow centres and have a very attractive five pointed star shape.** Reproduction is via seed that are produced in **round berries** that are **initially green mottled with white**, but **turn bright yellow** on maturity. This species is indigenous to southern Africa and is not usually a major sugarcane pest.

Potential Competitor in Cane

LOW

MEDIUM







Sonchus asper

SONAS

Spiny sow thistle Doringsydissel

An annual herb similar to Sonchus oleraceus that can grow up to 0,8m. It has hollow stems with milky latex, and has a short taproot. Flowers are pale yellow and seeds have silky tufts for wind dispersal. Leaves are alternate, can be blue/ green with a purple tinge, cling to the stem and have stiff spines on the edges. Young seedlings are rosette shaped. It reproduces from seed but is not an important sugarcane weed. It is native to Eurasia.







Sonchus oleraceus SONOL Common sow thistle Gewone sydissel

Ihahabe

An erect annual to 0,8m with green to purple **ribbed**, **hollow stems** that contain a **milky sap**. Flowers are yellow, then form **silky tufts** that transport seed by wind. Leaves are alternate and toothed at the margins with **soft prickly spines**. **Leaves clasp the stem**, and the green colour is often fringed with purple. Likes moist situations, is edible and reproduces from seed. Can be a problem in cane if allowed to mature. Is controlled by many herbicides. Native to Europe.









Striga asiatica

STRLU

Witchweed / Common mielie-witchweed Rooiblom / Gewone mielierooiblom Isona

This weed is an erect, much branched annual that can reach 0,3m in height. The leaves are opposite, **very narrow, rough to the touch** and become black when dry. The solitary flowers are **small and bright red** and are found in the upper leaf axils. This species is parasitic on grass roots (including sugarcane) and produces large quantities of minute seed (up to 500 000/plant). The seed resembles dust, can lie dormant for many months and germinate when conditions are right. It is widespread in the irrigated cane areas, and it is suspected that seed is distributed through irrigation water. It is often overlooked until high populations have developed. This is an indigenous species. *Striga elegans* is similar to this species but is taller and stouter.

Potential Competitor in Cane
LOW MEDIUM HIGH





Tagetes minuta

TAGMI

Tall khaki weed / Khaki weed Lang kakiebos / Kakiebos

This is an erect annual that can reach 1,2m in height. It has distinctly furrowed stems. The leaves are small, sharply toothed, **very strongly scented** and produce **yellow staining sap** when crushed. Flower heads are yellow/green and dry in bunches at the tops of the plant. It propagates by seed which is dispersed by wind and water. It is used as a green manure and is said to guard against nematodes. This species is also used in the perfume industry. It will compete with cane in the Midlands if allowed to grow tall. Originates in South America.

Potential Competitor in Cane

LOW

MEDIUM

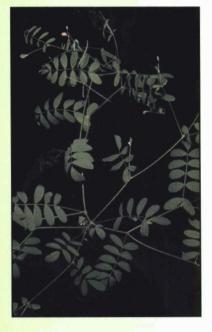




Tephrosia purpurea

TEPPU

This is a semi-creeping plant with stems that radiate from a midpoint. Flowers are mauve and pea-like, giving rise to smooth pods with distinct seed swellings. This species is not common in cane fields.







Triumfetta pilosa

TRIPI*

This is a tall, upright plant. The leaves are serrated, rough to the touch and aromatic when crushed. The plant has small yellow flowers that give rise to burrs that form clusters at the ends of the branches.



Potenti	al Competitor in (Cane
LOW	MEDIUM	HIGH









Triumfetta rhomboidea

TIUBA

Chinese burr Klitsbossie

Triumfetta rhomboidea is an upright annual or perennial plant with a tough, stout stem that can reach 1,3m in height. The leaves are opposite, hairy, have **three prominent pointed lobes** and have a rounded appearance with long petioles. The flowers are small, yellow and are arranged in clusters. The **fruit is a burr** that is covered in **hooked prickles**. The plant can reproduce by seed and rhizomes and can grow tall and compete with cane for light. However, numbers are usually not high. This species is thought to be indigenous to southern Africa.

Potenti	al Competitor in	Cane
LOW	MEDIUM	HIGH

Verbena tenuisecta

VEBTE

Fine-leafed verbena

Fynblaar verbena

This is a prostrate to sub-erect sprawling perennial with many angular branches. The leaves are very hairy. The flowers are **bright mauve fading to blue**, and can also occasionally be white. This plant is very **common along roadsides** and can also occur in cane fields. It reproduces by seed and stolons. The country of origin is South America.







Vigna vexillata

VIGVE

Wild cowpea

Wilde-akkerboontjie

Wild cowpea is a scrambling and creeping annual with mauve/lilac pea-like flowers. The seed pods are up to 100mm long and are erect when green, but about 90 degrees to the stems when mature. The **leaves are trifoliate** and, like the stems, are rough to the touch. The plant can propagate by both seeds and stolons, and has been found in large numbers in cane fields under irrigation. It is an indigenous species.







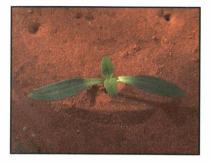
Xanthium spinosum XANSP

Spiny cockleburr Boetebossie Iligcume

This is a branched annual with stems that are smooth and armed with **three pronged spines.** It can reach a height of up to 1,2m. The leaves can be **strongly three lobed** and have a **woolly** appearance on the underside. The flowers are small and nondescript and form in the leaf axils. The fruits are **burr-like** and turn from green to brown when mature. Spines on the burrs are red and hooked. This weed spreads by seed but is not a widespread weed of sugarcane. Is a native of South America.









Xanthium strumarium

XANST

Large cockleburr / Cockleburr Kankerroos

Large cockleburr is a branched annual up to 1,2m in height with thick stems that are often spotted with red. The leaves are **broad** and hairy on both surfaces. The flowers are small and greenish, and develop in the leaf axils. The **fruits are burrlike**, form clusters and turn from green to brown when mature. Each burr has two "horns" at the upper end, and the whole body is covered with hooked spines. It propagates by seed that is dispersed by water and animals. It originates in the Old World tropics.

Potential Competitor in Cane		
LOW	MEDIUM	HIGH



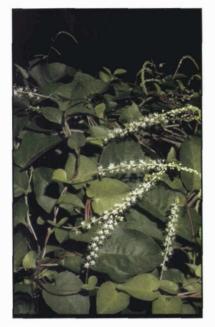


BROADLEAF WEEDS

Creepers and Vines





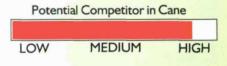


Anredera baselloides

BOGCO

Madeira vine

This is a branched perennial **climber** that can reach 6m or more. It has **succulent leaves** and stems, and scrambles over other plants. The flowers are white and are in attractive clusters that are very fragrant. This species does not produce fruit but reproduces from **aerial tubers** that appear in the axils of the leaves. These eventually drop to the ground and the plants propagate vegetatively. The tubers are edible, which probably contributes to the spread of this weed. Propagation can be by underground tubers as well. This species can be a serious weed in cane, where it will smother the crop if allowed to grow unchecked. It is also very resistant to most herbicides, but can be effectively controlled by spraying Garlon 4. The species originates in Ecuador.



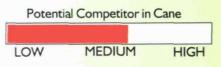




Cissampelos mucronata

CSSPA

This is an attractive **creeper** with a thick root system. The **leaves are strongly heart shaped, and have very shallow basal indentations and broad rounded tips**. They are covered with a very fine down. Leaves alternate along stems that also have a fine down-like cover, although they are smooth to the touch. This plant does not produce latex when damaged. The flower panicles are very small and insignificant. This is a common creeper in the Mpumalanga lowveld but can also be found in the cooler areas.













Cucumis metuliferus

CUMME*

This is a creeper that has all parts, except the fruit, **extremely rough to the touch** due to the presence of small stiff hairs. The leaves are deeply lobed and are usually a pale green. The plant has small, pale yellow flowers that form **spiny**, **cucumber-like fruit** that turn from a dark green to bright orange when ripe. This is a vigorous climber that attaches to the host with tendrils and can easily reach the top canopy in mature cane. It can be a troublesome weed in the irrigated northern areas.





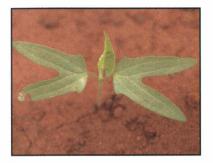
CUMMY Striped wild cucumber Gestreepte wildekomkommer / Wildekomkommer

Sendelenja

This plant is a branched **sprawling** annual with tendrils and a thick tap root. The stems are grooved, long and are **rough to the touch**. The leaves are lobed, rough to the touch and arranged alternatively along the stems. Flowers are pale yellow and form into **cucumber-like fruits**. The fruit has **soft spines** and turns from **dark green with stripes to orange when mature**. The green fruit is poisonous and the plant spreads by seed. It is able to climb up sugarcane stalks and compete with the crop. It is common in the northern irrigated areas and is indigenous to southern Africa.

Potential Competitor in Cane		
LOW	MEDIUM	HIGH









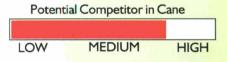


Ipomoea plebeia subsp. Africana

IPOPF

Slingerduisendpoot

This is a rampant, twining, annual climber that has purple stems that are rough to the touch and can twist to become rope-like. The leaves are heart shaped, deeply notched at the base, alternate along the stems and have smooth margins. When broken, **all parts exude a milky latex**. The white/mauve flower is small and usually insignificant. It reproduces by seed and the seedling leaves have distinct **double lobed cotyledon leaves**. This is a very common weed in cane in the Mpumalanga lowveld, and is also extremely widespread throughout the remainder of the industry. This is an indigenous species.



lpomoea purpurea PHBPU

Morning glory / Common morning glory Purperwinde Ijalamu

Morning glory is a twining, trailing annual creeper with heart shaped alternate leaves that are pointed at the tips. The stems are covered in fine hairs. The flower is trumpet shaped and large, with colour that varies from white through to mauve, purple, pink, reddish or magenta. The flowers appear singly or in groups of up to five. The throat of the flower is usually white/pale yellow. It reproduces from seed and can be a problem in cane and indigenous bush if allowed to become dense. It is a native of tropical America.

Potential Competitor in Cane

LOW

MEDIUM





lpomoea quamoclit

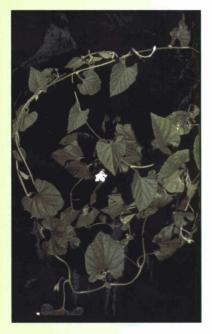
IPOQU

Cypress vine / Cardinal climber

This is an annual climber that can reach 6m. It has very fine **needle-like leaves** and trumpet shaped dark red flowers with five lobes that emerge in summer. This species has spread into cane fields in certain areas but is in very low numbers at present.







Potential Competitor in Cane

Ipomoea sinensis

IPOSE*

Ijalambu

This is an annual, prostrate to sub-erect **climbing** species that has several stems that can reach 2m in height. The flower is usually white to mauve with a darker centre. This weed propagates from seeds and the small **seedling has distinct heart shaped cotyledon leaves**. It is not very common in sugarcane and is indigenous to southern Africa.

Potential Competitor in Cane		







lpomoea wightii

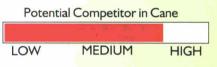
IPOWR

This is a **creeper** with **very rough leaves and stems** due to short stiff hairs. The leaves are very **strongly quilted**. The flowers are tubular in shape and lilac in colour with dark centres. This is not a common weed in sugarcane fields.









Mukia maderaspatana

MUKMA*

This is a **creeping** perennial cucumber-like plant with **very rough leaves and stems** due to the presence of **stiff hairs**. The whole plant is **very rough to the touch**. The flowers are yellow, and appear in small bunches in the leaf axis. The plant produces small **green berries** that turn **red** on maturity and reproduction is by seed. The plant has **thin spring-like tendrils** that attach it to its host. It is often found on the coast as well as in the irrigated areas, but is usually not in large enough numbers to compete strongly with cane. This plant is indigenous to southern Africa.

Potential Competitor in Cane

LOW

MEDIUM HIGH





BROADLEAF WEEDS

Trees





Acacia mearnsii

ACAME*

Black wattle

Swartwattel

This **tree** species can be a troublesome weed in sugarcane as it is **tall growing** and therefore competes strongly with the crop. It produces large amounts of seed which may lie dormant in the soil for many years. The germination of *A. mearnsii* seed is stimulated by fire. This species is a major invader of disturbed areas and every effort should be made to keep it out of cane fields. It originated from Australia.

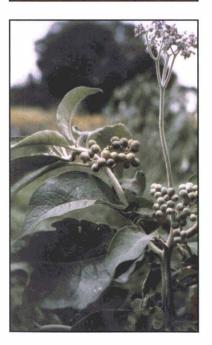
Potential Competitor in Cane			
LOW	MEDIUM	HIGH	

Solanum mauritianum

SOLER

Bugtree / Bugweed

Luisboom / Groot bitterappel



Bugweed is a perennial species that grows into a medium sized tree. All parts are covered in **dense hairs** that result in a **felt like appearance**. The **leaves are very strongly aromatic**. The mature tree produces bunches of **lavender coloured** flowers that form compact clusters of berry-like fruit that turn **yellow** when ripe. It reproduces from seed and has the potential to smother sugarcane if not eradicated early. This plant is a very serious threat to the environment. It originates from South America.





Potential Competitor in Cane

LOW MEDIUM HIGH



GRASSES

Tufted Grasses





Brachiaria eruciformis

BRAER*

This is an annual tufted grass that can reach Im in height. It is common in wet areas but is not regarded as a major sugarcane weed.









Potential Competitor in Cane		
LOW	MEDIUM	HIGH



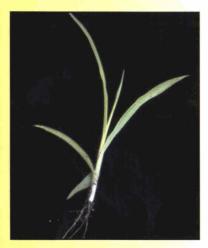
Chloris pycnothrix is an annual grass that can be common in cane, but seldom becomes economically important. It is an indigenous species that spreads by seed.



Potential Competitor in Cane

LOW MEDIUM





Digitaria ciliaris

DIGSP

Tropical finger grass

Tropiese vingergras

This is an erect annual grass that reproduces from seed. The leaf sheaths are covered in soft white hairs that stand erect. This is an indigenous species.





Digitaria debilis

DIGDI*

Finger grass

Finger grass is a **large**, sprawling, annual grass with **very large drooping flower heads**, each with about six racemes. It flowers from November to June. It is a hairy species with stiff hairs mainly on the leaf sheaths. This grass could creep on the surface as it roots readily from the lower nodes, but also propagates from seed. It is an indigenous species.



	and the state of the	
LOW	MEDIUM	HIGH





Digitaria nuda

DIGNU

This annual tufted grass can grow to 0,5m. The seedlings of this species **are very hairy**. The stems of mature plants are **prostrate but turn up at the ends** (decumbent), and older plants can root from lower nodes. The flower is made up of 3-8 racemes that radiate from a common point. This species is very common in



Echinochloa colona

ECHCO

Marsh grass

the industry and germination on the coast can occur throughout the year.

Potential Competitor in Cane

MEDIUM

HIGH







Moerasgras
This is a smooth annual grass that has leaves that are often decorated with purple

bands. The mature grass is often low growing and prostrate with stems that turn

LOW



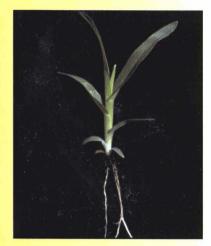
up to a maximum height of 0,6m. It reproduces from seed of which thousands may be produced by each plant. This grass is very common in the warmer northern areas. It is thought to have originated from India, but could also be indigenous to southern Africa.

Potential Competitor in Cane

LOW MEDIUM

HIGH





Eleusine coracana

ELECO

African finger millet Korakan / Osgras

This is a tufted annual grass that can reach 0,6m in height. It is very similar to *Eleusine indica* but the latter has stolons. It is very common in the sugarcane areas,



but fortunately can be easily controlled with herbicides. It originates from Africa and spreads by seed.

Potentia	al Competitor in	Cane
LOW	MEDIUM	HIGH





Eragrostis ciliaris ERACI

Stink lovegrass

Stink eragrostis

This is a tufted annual that can reach 0,9m. It reproduces from seed, and its origin is uncertain.



Potential Competitor in Cane

LOW MEDIUM HIGH





Leersia hexandra

LERHE

Rice grass / Swamp cut grass Wilderysgras / Moerashaakblaar

This is a grass of wet areas and can even grow in shallow water. It normally reaches a height of 0,4-0,6m and can creep with long, slender rhizomes. The



Melenis repens

Natalse rooipluim

Natal red-top

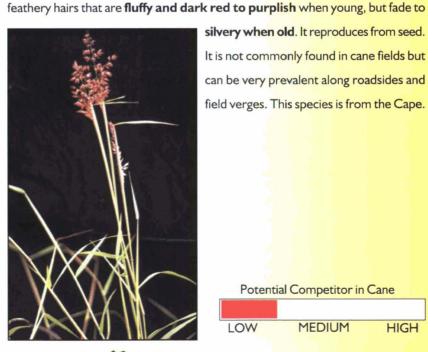
RHYRE

leaves are rough and hard to handle. The seed heads are often red to orange in colour and the panicle has a typical ricelike appearance. This is a good pasture grass. It is not regarded as a widespread problem in sugarcane but has the potential to become so if allowed to spread.

Potential Competitor in Cane		
LOW	MEDIUM	HIGH







silvery when old. It reproduces from seed. It is not commonly found in cane fields but can be very prevalent along roadsides and field verges. This species is from the Cape.

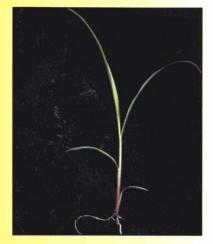
Potential Competitor in Cane

LOW

Natal red-top is an erect perennial grass. The flower heads are made up of shiny,

MEDIUM

HIGH



Panicum maximum PANMA Guinea grass

Gewone buffelsgras

Ubabe

Ubabe is an indigenous, perennial, upright species with **conical shaped flower heads**. Seedlings are somewhat weak in appearance with very narrow dark green leaves and **a characteristic purple tinge to the stems**. The mature plant has



Panicum schinzii

a deep root system and has vast quantities of seed that are spread by birds. As the grass tillers, **it grows prostrate and only later becomes erect**. The dark green leaves can also be tinged with purple. This species is drought resistant and looks similar to cane, making detection sometimes difficult. It is a major problem in sugarcane and is probably the most important tufted grass in the South African sugar industry. Growers are strongly advised to control it with pre-emergence herbicides.

Potential Competitor in Cane

LOW	MEDIUM	HIGH





PANSC* Vlei-panicum / Sweet buffalo grass / Blue panic Soetgras / Vleibuffelsgras / Soetbuffelsgras

Vlei-panicum is an annual, sprawling to erect grass that is widespread in the cooler moister areas of the industry. It normally reaches a height of between 0,9



and 2,0m and can compete very effectively with sugarcane. It is recognisable by its **smooth, hairless appearance** as well as having **red/purple stems**. This reddish colouration is also very distinguishable at the seedling stage. The inflorescence can droop down and is less compact than that of *P. maximum* (Ubabe). It propagates by seed but can also root from the lower nodes. It is highly palatable and originates from southern Africa.











Panicum subalbidum

PANAN

Elbow buffalo grass Elmboog buffelsgras

This is a tufted grass with smooth stems and conical flower head. The **stems are decumbent and are reddish in colour.**



Potential Competitor in Cane		
LOW	MEDIUM	HIGH

Paspalum dilatatum

PASDI

Common paspalum Gewone paspalum

Common paspalum is an upright perennial that can reach 1,5m. It usually **bends** over when mature. The leaves are flat, smooth and **crinkled at the edges**.



This grass can reproduce by both seed and rhizomes. The **seedling is covered in silky hairs.** The flower heads have 3-5 racemes that contain **sticky seed** that are only on one side of each flower spike. This species is usually found in isolated clumps in cane, often only within the cane row where it is difficult to distinguish. This is a South American species that makes a good fodder.





Paspalum urvillei

PASUR

Tall paspalum

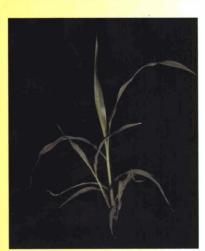
Langbeen paspalum

This is a clumping perennial grass that has erect stems that can reach up to 2,5m. The flower heads are made up of 10-20 closely spaced spikes that are **compact**



and unlike those of *P. dilatatum*. Reproduction is by seed and the **seedlings are very hairy.** It is usually found in isolated clumps in cane, often in the row. This species comes from South America.





Rottboellia conchinchinensis ROOEX Guinea-fowl grass

Tarentaalgras

This is an erect annual species that can reach 3m in height. The older stems are hollow and are supported by **prop roots** similar to maize. The first leaf of the seedling closest to the ground is **broader and shorter than the second leaf.** Leaves and sheaths of larger plants are pale green in colour and are covered in stiff hairs that make handling difficult. The flower head is spike-like



and develops **barrel shaped seeds** that are attached one on top of another to give a **rat tail** appearance. It spreads only by seed that are distributed by birds. *Rottboellia* seed can germinate from variable depths which results in it germinating over a long period. It therefore has the potential to become a major problem in cane, and can form large colonies if allowed to spread. It is a native of India but could also be indigenous to southern Africa.







Setaria pallida – fusca

SETPF

Red bristle grass

Rooiborselgras / Tuinsetaria

This is an annual species that is most probably indigenous to southern Africa. This grass reproduces from seed, and the seedlings have **blood coloured lower stems** that remain so up to maturity.









Potential Competitor in Cane		
L.		
LOW	MEDIUM	HIGH

Setaria verticillata SETVE Sticky bristle grass Klitsborselgras

This is a tufted annual grass that can grow up to I m in height. The **seedhead is** cylindrical, foxtail in appearance and the **seed clings to clothing** like small



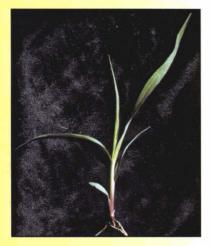
burrs. The leaves are flat and smooth and are usually pale green. It reproduces from seed. A distinguishing feature of the seedling is that it has a **very flat stem**, with striations on the undersides of the leaves and on the leaf sheath. It is common in the coastal sands and is usually easy to control with herbicides. This grass comes from Europe and Asia.

Potential Competitor in Cane

LOW

MEDIUM HIGH





Sorghum bicolor SORVE **Common wild sorghum**

Gewone wildesorghum

Uqhangabothi

Common wild sorghum is a tall annual or perennial species that can grow up to 2,5m. A distinguishing characteristic of the seedling is that the first leaf is shorter and wider than the next leaf. The seedlings also have reddish to purple stems that are upright. The flower heads are large, triangular and produce large teardrop shaped seeds that are distributed mainly by birds. The leaves are smooth



and hairless. The stems of larger plants have prop roots similar to maize. This species, unlike Sorghum halepense, does not have rhizomes. It has become an economically important weed species that is widespread in the warmer areas of the industry. It is common in the industry to find tall specimens with the seed heads protruding above large cane. It is therefore advisable for growers to control this species at the pre-emergence stage of development.

Potential Competitor in Cane



Johnsongras



Sorghum halepense **SORHA** Johnson grass

Johnson grass is an erect perennial grass that spreads by **rhizomes** and seed. The flower head is conical, purplish and is a prodigious seed producer. The seeds are



large. This is a serious weed when present in cane as it is difficult to eradicate due to the underground stems. It may possess toxins that poison livestock. This species originates from the Mediterranean regions of Europe and Asia.

Potential Competitor in Cane

	and the second	
LOW	MEDIUM	HIGH





Sporobolus africanus

SPZAF

Ratstail dropseed

Rotstert fynsaadgras / Rotstert

This is an erect, perennial indigenous grass with leaves that grow from the base of the plant. The leaves are smooth and are often folded. The **flower head has a**



cylindrical rat tail appearance. The stems are very tough and difficult to break. It propagates from seed, is common along grassed roadways but is not usually abundant in cane fields.

Potential Competitor in Cane		
LOW	MEDIUM	HIGH







Kleinwortelsaadgras
This grass grows prostrate, but can turn upwards to reach 0,4m as it matures.

The leaf blade is very hairy at the margins. The seed head is narrow and spike-



like and the **seeds are carrot-like and very sticky**. Seeds of carrotseed grass **adhere to clothing** and are spread in this fashion. It is a very common grass in the irrigated areas as well as on coastal sands.

Potential Competitor in Cane
LOW MEDIUM HIGH





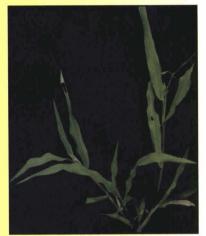
Urochloa panicoides

UROPA Annual signalgrass Eenjarige sinjaalgras ImBubu, isiNandi



Urochloa panicoides is a tufted annual that usually only reaches 0,3m. It often has a flattish cartwheel-like appearance. This species can root from nodes but propagation is mainly by seed. The **leaves are short, wide and hairy and have crinkled edges**. The flower head is made up of a number of racemes arising at intervals along the flower stem. This grass is palatable and makes a good hay.

LOW	MEDIUM	HIGH







GRASSES

Creeping Grasses







Cynodon dactylon

CYNDA

Couch grass

Kweek / Gewone kweekgras

Ngwengwe Uqethu

Kweek is a wiry, perennial, **fine leafed** creeping grass. It roots from the nodes and also propagates from rhizomes, stolons and to a far lesser extent, seed. This grass is spread by implements. The **flower is slender and upright with 3-7 branches in a whorl**. Kweek is very tolerant of salt and drought conditions. It is a vigorous competitor with cane but cannot tolerate shade and can therefore be suppressed by a fast forming canopy. It is of major economic importance as it has become the limiting factor in cane production in some areas. It can be controlled with glyphosate in larger cane but knockdown products need to be used in small cane. Where it has overrun small cane, the crop can be cut to ground level and the undisturbed grass sprayed ± 24 hours later with a glyphosate based treatment. This species is very often used as a lawn grass and for soil stabilisation. Originates in tropical Africa or Indo-Malaysia.

Potenti	al Competitor in	Cane
	1.1	
LOW	MEDIUM	HIGH





Cynodon nlemfuensis

CYNNL

Giant stargrass

Stergras

Giant stargrass is a stoloniferous perennial that was originally introduced as a fodder crop, but has escaped into cane growing areas. The species is **tall grow-ing** and therefore competes well with cane. The flowers are arranged as a **whorl** and are similar to *C. dactylon* but are usually larger and have a **purple tinge**. Flowering takes place from January to March, and it can propagate by seed and stolons. This grass is exceptionally hardy and difficult to eradicate with herbi-cides. It originates in tropical Africa.

Potential Competitor in Cane

LOW MEDIUM HIGH





Dactyloctinium australe

DTTAU*

Durban grass / LM Grass

Natal-hoenderspoor

Durban grass is a flat growing soft perennial grass that tolerates shade well. The leaves are wavy and have hairs along the edges. Each flower raceme is centipedelike and the way it spreads is by seed and stolons. This is an indigenous grass that is only occasionally found in cane.

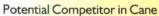


Digitaria abyssinica

DIGSC

Abyssinian finger grass / East African finger grass Dunn's-vingergras / Kweekvingergras

Abyssinian finger grass is a rhizomatous perennial that forms large thick mats. It looks similar to *Panicum maximum* (Ubabe) but the leaves tend to be more erect and the flower head is smaller. It is found in high populations in certain areas where it has become a major weed pest in sugarcane. This grass is very common in Midlands areas such as Richmond and Mid-Illovo and also on the North Coast. It is difficult to control and products such as glyphosate have to be applied repeatedly to suppress it. TCA and MSMA have proved to be effective. It spreads by both seed and rhizomes. This species could be indigenous to southern Africa.



LOW

MEDIUM



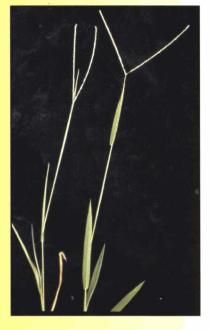


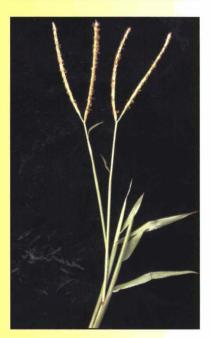




HIGH







Digitaria longiflora

DIGLO

False couch finger grass

False couch finger grass is a small, wiry, much branched, creeping perennial that spreads by seed, rhizomes and stolons. **It is not very leafy and the flower heads are made up of a pair of racemes.** It is sometimes confused with *Cynodon dactylon* but the leaves of *D. longiflora* are **wider in relation to length.** It favours the sandy soils and is a good forage grass. This species originates in southern Africa.

Potenti	al Competitor in	Cane
LOW	MEDIUM	HIGH

lschaemum fasciculatum

ISCFA*

Border grass

Rooivleigras

This is a perennial, creeping species that spreads by both seed and rhizomes. It originates in southern Africa.











Paspalum distichum

PASDI

Couch paspalum

Kweek-paspalum

This is a creeping, mat-forming perennial grass that spreads by rhizomes, stolons and seed. It is normally prostrate but can stand up at the stem ends. The stems have a flattened appearance. It usually prefers damp, low lying areas where it becomes a problem in cane. The **flower head is made up of two racemes** (sometimes three) that are up to 70mm long. This species is indigenous to southern Africa.

Potential Competitor in Cane					
	· • • •				
LOW	MEDIUM	HIGH			







Creeping paspalum Dronkgras / Slootgras Isiamuyisane

This is a creeping grass that spreads by seed and stolons. It thrives in damp areas

and could be indigenous to southern Africa.



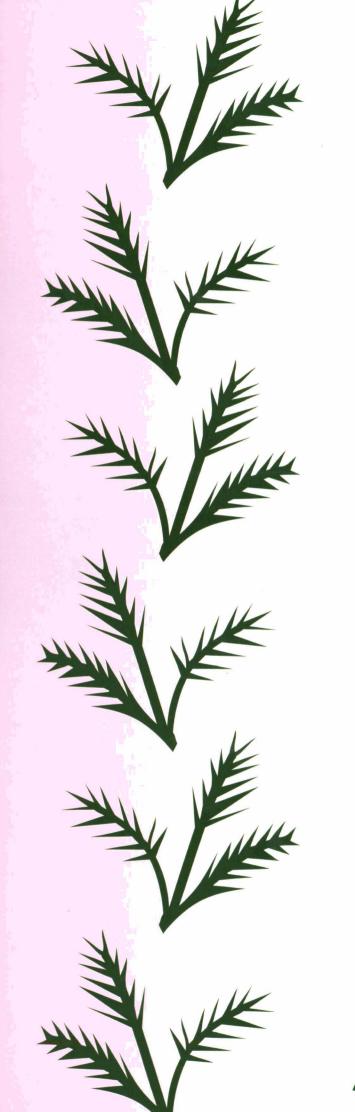
Potential Competitor in Cane

LOW

MEDIUM

HIGH





SEDGES

Watergrasses

90



Bulbostylis hispidula

BULHI*

Slender sedge

Fynbiessie

This is a **very fine leafed** erect annual or biennial **sedge** that is common in cane on sandy coastal soils. It reproduces from seed. It does not compete physically with cane and is an indigenous species to southern Africa.







Potential Competitor in Cane
LOW MEDIUM HIGH

Cyperus esculentus

CYPES

Yellow flowered watergrass/Yellow nutsedge/Yellow nutgrass Geeluintjie

Indawo

This is an erect perennial sedge that has rhizomes. The stems are triangular, grow to 0,3-0,9m in height and have **radiating flower heads that are straw coloured**. The **tubers are pale, round, develop at the ends of the short rhizomes** and can germinate deep down. These tubers are softer than *C. rotundus* and are also edible. The leaves are greener than *C. rotundus* and the ends are pinched rather than rounded. It reproduces mainly from tubers but can also spread by seed. The seedlings are very grass-like when young. *C. esculentus* is found throughout the industry and is very common in the cooler, higher altitude



areas, whereas *C. rotundus* prefers warmer conditions. The competitive effects from this weed can be severe as populations can produce up to 100% ground cover. This species is fairly easy to control with post-emergence herbicides that are relatively safe to use on cane. It is uncertain where this species originates from, but it is most likely native to North America, Europe and Asia.











Cyperus natalensis

CYPNA*

This is a perennial species that can grow to 1 m in height. The **stems are trian**gular but have rounded edges that are not sharp like *C. rotundus*. The leaves are also very stiff and **strongly grooved**, with the undersides being much lighter in colour than the upper surfaces. It spreads by stolons that form tubers at intervals and can develop thick homogenous stands if allowed to become established.



This is essentially a coastal species that appears to favour the sandy soils in Zululand where it can occur in high populations.



Cyperus rotundus. Subspecies tuberosus

CYPRO

Purple watergrass / Purple nutsedge

Rooiuintjie

Cyperus rotundus is a perennial sedge species that has been described as the world's worst weed. The **stems are triangular** and the mature plant can reach a height of 0,6m. The **flower heads radiate spoke-like** at the top of the stem. The colour of the flower is usually **dark reddish to maroon** but one race has straw coloured flowers. The yellow flowered race is usually larger. **The leaves arise at ground level** and are **dark green in colour** with **rounded tips**. The plant can excrete phytotoxins into the soil which may suppress other plants. It normally reproduces by means of underground tubers, but can also produce



viable seed. **Tubers are irregular in shape, hard to crush and form in chains along the rhizomes**. They are edible and can remain dormant for many years. This species is usually **tolerant of most herbicides** but there are new products available that can control it. This species is a native of Eurasia.





INDEX				
	Bayer			
Botanical name	Code	English name	Afrikaans name	Page
Broadleaf Weeds - Flat and	d low growin	ng		
Acanthospermum australe	ACNAU	Prostrate starburr	Kruip sterklits	5
Aizoon canariense	AIZCA*			5
Alternanthera pungens	ALRRE	Paperthorn	Kakiedubbeltjie	6
Argemone mexicana	ARGME	Mexican poppy	Meksikaanse papawer	6
Argemone subfusiformis	ARGSU	White flowered mexican poppy	Meksikaanse papawer	7
Centella asiatica	CLLAS	Pennywort	Waternavel	7
Chamaesyce hirta	EPHHI	Red milkweed	Rooimelkkruid	8
Chamaesyce inaequilatera	EPHIN*	Smooth creeping milkweed	Gladde kruipmelkkruid	8
Chamaesyce prostrata	EPHPT	Hairy creeping milkweed	Harige kruipmelkkruid	9
Chenopodium carinatum	CHEPU	Green goosefoot	Groenhondebossie	9
Commelina benghalensis	COMBE	Benghal wandering jew	Wandelende jood	10
Commelina erecta	COMER			10
Coronopus didymus	COPDI	Carrot weed	Peperkruid	11
Desmodium incanum	DEDCA			11
Dichondra repens	DIORE	Wonder lawn		12
Drimiopsis maculata	DRIMA*			12
Emex australis	EMEAU	Spiny emex	Emex-dubbeltjie	13
Gnaphalium coarctatum	GNACO*			13
Gomphrena celosioides	GOMCE	Prostrate globe amaranth	Kruip-knopamarant	14
Hibiscus trionum	HIBTR	Bladder hibiscus	Terblansbossie	14
Hypochoeris brasiliensis	HRYBR	Cat's ear		15
Hypochoeris radicata	HRYRA	Spotted cat's ear	Skaapslaai	15
Indigofera spicata	ANDSP			16
Lactuca capensis	LACCP			16
Lactuca indica	LACIN			17
Lactuca serriola	LACSE	Wild lettuce	Wilde slaai	17
Melilotus indica	MEUIN	Annual yellow sweet clover	Eenjarige geelstinkklaver	18
Oldenlandia corymbasa	OLDCO*			18
Oxalis corniculata	OXACO	Creeping sorrel	Tuinranksuring	19
Oxalis latifolia	OXALA	Red garden sorrel	Rooituinsuring	19
Oxalis semiloba	OXASE*	Transvaal sorrel	Transvaalse suring	20
Physalis viscosa	PHYVI	Sticky gooseberry	Klewerige appelliefie	20
Plantago major	PLAMA	Ripple-seed plantain	Breëblaar plantago	21
Portulaca oleracea	POROL	Common purslane	Gewone poslein	21
Richardia brasiliensis	RCHBR	Tropical richardia	Tropiese richardia	22
Rumex crispus	RUMCR	Curly dock	Krultongblaar	22
Sisymbrium thellingii	SSYTH	Common wild mustard	Gewone wildemosterd	23
Spilanthes decumbens	SPIDE*			23
Stellaria media	STEME	Chickweed	Gewone sterremuur	24
Taraxacum breviscapum	TAROF	Common dandelion	Perdeblom	24
Tribulis terrestris	TRBTE	Common dubbeltjie	Gewone dubbeltjie	25
Tridax procumbens	TRQPR	Daisy / Tridax daisy	Aster	25
Youngia japonica	UOUJA	Native hawk's bird		26
Zaleya pentandra	ZAPEN*	African purslane	Muisvygie	26



	Bayer			
Botanical name	Code	English name	Afrikaans name	Page

Broadleaf Weeds - Erect and/or tall growing

	a, or can 8.	61116		
Acalypha ecklonii	ACCEK			28
Ageratum conyzoides	AGECO	Billy-goat weed	Indringer-ageratum	28
Amaranthus hybridus	AMACH	Cape pigweed	Kaapse misbredie	29
Amaranthus spinosus	AMASP	Thorny pigweed	Doringmisbredie	29
Amaranthus thunbergii	AMATH	Red pigweed	Rooimisbredie	30
Amaranthus viridis	AMAVI	Pigweed	Skraal misbredie	30
Ambroisia artemisiifolia	AMBEL	Annual ragweed		31
Asclepias physocarpa	ASCPH*	Milkweed	Balbos	31
Bidens bipinnata	BIDBI	Spanish blackjack	Spaanse knapsekêrel	32
Bidens formosa	BIDFO	Cosmos	Kosmos	32
Bidens pilosa	BIDPI	Common blackjack	Gewone knapsekêrel	33
Cannabis sativa	CNISA	Indian hemp / Dagga	Dagga	33
Chamaesyce hypericifolia	EPHHS			34
Chenopodium album	CHEAL	White goosefoot	Withondebossie	34
Ciclospermum leptophyllum	APULE	Wild celery	Wilde seldery	35
Circium vulgare	CIRVU	Scotch thistle	Skotse dissel	35
Cleome monophylla	CLEMO	Single-leafed cleome	Enkelblaar cleome	36
Conyza bonariensis	ERIBO	Flax-leaf fleabane	Kleinskraalhans	36
Conyza floribunda	ERIFL	Tall fleabane	Vaalskraalhans	37
Corchorus trilocularis	CORDI*			37
Crassocephalum crepidioides	CRSCR			38
Datura stromonium	DATST	Common thorn apple	Stinkblaar	38
Didymodoxa caffra	DIDCA*			39
Eclipta prostrata	ECLAL	Eclipta	Eclipta	39
Euphorbia cyathophora	EPHCT			40
Euphorbia heterophylla	EPHHL	Painted euphorbia	Gekleurde euphorbia	40
Flavaria bidentis	FLABI	Smelter's bush	Smeltersbossie	41
Galinsoga parviflora	GASPS	Gallant soldier	Knopkruid	41
Gladiolus dalenii	GLADA*			42
Gnaphalium pensylvanicum	GNAPE		Roerkruid	42
Helichrysum cooperi	HELCO*		Geelsewejaartjie	43
Helichrysum ruderale	HELRU*			43
Hibiscus cannabinus	HIBCA	Kenaf	Wildestokroos	44
llysanthes dubia	ILYDU*			44
Indigofera parviflora	INDPA*	Woolly finger bush	Wolvingerbossie	45
Lepidium africanum	LEPAF	Pepper cress	Peperbossie	45
Lepidium bonariensis	LEPBO	Birdseed / Pepperweed	Peperbossie	46
Lepidium virginicum	LEPVI			46
Malvastrum coromandelianum	MAVCO	Prickly malvastrum		47
Mirabilis jalapa	MIBJA	Marvel of Peru	Vieruurblom	47
Nicandra physaloides	NICPH	Apple of Peru	Basterappelliefie	48
Nothoscordum gracile	NOTGR*	False garlic		48
Oenothera parodiana	OENPA*			49
Parthinium histerophorus	PTNHY	Demoina weed	Demoinabossie	49
Phyllanthus burchellii	PYLBU*			50
Phyllanthus meyerianus	PYLME*			50
Physalis angulata	PHYAN	Wild gooseberry	Wilde appelliefie	51



	Bayer			
Botanical name	Code	English name	Afrikaans name	Page
Phytolacca octandra	PHTOC	Inkberry	Inkbessie	51
Pseudognaphalium luteo-album	PSELA*	Jersey cudweed	Roerkruid	52
Ricinus communis	RIICO	Castor-oil plant	Kasterolieboom	52
Schkuhria pinnata	SCKPI	Dwarf marigold	Kleinkakiebos	53
Senecio madagascarensis	SENMA*		Groot senecio	53
Senecio polyanthemoides	SENPO*			54
Sesbania bispinosa	SEBCA	Spiny sesbania	Stekelsesbania	54
Sida alba	SIDSP	Spiny sida	Stekeltaaiman	55
Sida rhombifolia	SIDRH	Pretoria sida	Pretoria sida	55
Siegesbeckia orientalis	SIKOR	Common St. Paul's wort	Gewone St. Paul's wort	56
Solanum acanthoideum	SOLAC*			56
Solanum nigrum	SOLNI	Black nightshade	Nastergal	57
Solanum panduraeforme	SOLPA*	Bitter apple	Bitterappel	57
Sonchus asper	SONAS	Spiny sow thistle	Doringsydissel	58
Sonchus oleraceus	SONOL	Common sow thistle	Gewone sydissel	58
Striga asiatica	TRLU	Witchweed	Rooiblom	59
Tagetes minuta	TAGMI	Khaki weed	Kakiebos	59
Tephrosia purpurea	TEPPU			60
Triumfetta pilosa	TRIPI*			60
Triumfetta rhomboidea	TIUBA	Chinese burr	Klitsbossie	61
Verbena tenuisecta	VEBTE	Fine-leafed verbena	Fynblaar verbena	61
Vigna vexillata	VIGVE	Wild cowpea	Wilde-akkerboontjie	62
Xanthium spinosum	XANSP	Spiny cockleburr	Boetebossie	62
Xanthium strumarium	XANST	Large cockleburr	Kankerroos	63

Broadleaf weeds - Creepers and vines

Anredera baselloides	BOGCO	Madeira vine		65
Cissampelos mucronata	CSSPA			65
Cucumis metuliferus	CUMME*			66
Cucurmis myriocarpus	CUMMY	Striped wild cucumber	Wildekomkommer	66
lpomoea plebeia	IPOPF		Slingerduisendpoot	67
lpomoea purpurea	PHBPU	Morning glory	Purperwinde	67
lpomoea quamoclit	IPOQU	Cypress vine / Cardinal climber		68
lpomoea sinensis	IPOSE*			68
lpomoea wightii	IPOWR			69
Mukia maderaspatana	MUKMA*			69

Broadleaf weeds - Trees

Acacia mearnsii	ACAME*	Black wattle	Swartwattel	71
Solanum mauritianum	SOLER	Bugtree / Bugweed	Luisboom	71

Grasses - Tufted grasses

Brachiaria eruciformis	BRAER*			73
Chloris pycnothrix	CHRRA	Spiderweb chloris	Spinnerakchloris	73
Digitaria ciliaris	DIGSP	Tropical finger grass	Tropiese vingergras	74
Digitaria debilis	DIGDI*	Finger grass		74



	Bayer			
Botanical name	Code	English name	Afrikaans name	Page
Digitaria nuda	DIGNU			75
Echinochloa colona	ECHCO	Marsh grass	Moerasgras	75
Eleusine coracana	ELECO	African finger millet	Korakan / Osgras	76
Eragrostis ciliaris	ERACI	Stink lovegrass	Stink eragrostis	76
Leersia hexandra	LERHE	Rice grass	Wilderysgras	77
Melenis repens	RHYRE	Natal red-top	Natalse rooipluim	77
Panicum maximum	PANMA	Guinea grass	Gewone buffelsgras	78
Panicum schinzii	PANSC*	Vlei-panicum	Soetgras / Vleibuffelsgras	78
Panicum subalbidum	PANAN	Elbow buffalo grass	Elmboog buffelsgras	79
Paspalum dilatatum	PASDI	Common paspalum	Gewone paspalum	79
Paspalum urvillei	PASUR	Tall paspalum	Langbeen paspalum	80
Rottboellia conchinchinensis	ROOEX	Guinea-fowl grass	Tarentaalgras	80
Setaria pallida – fusca	SETPF	Red bristle grass	Rooiborselgras	81
Setaria verticillata	SETVE	Sticky bristle grass	Klitsborselgras	81
Sorghum bicolor	SORVE	Common wild sorghum	Gewone wildesorghum	82
Sorghum halepense	SORHA	Johnson grass	Johnsongras	82
Sporobolus africanus	SPZAF	Ratstail dropseed	Rotstert fynsaadgras	83
Tragus berteronianus	TRGBE	Small carrotseed grass	Kleinwortelsaadgras	83
Urochloa panicoides	UROPA	Annual signalgrass	Eenjarige sinjaalgras	84
Grasses - Creeping grasses				
Cynodon dactylon	CYNDA	Couch grass	Kweek	86
Cynodon nlemfuensis	CYNNL	Giant stargrass	Stergras	86
Dactyloctinium australe	DTTAU*	Durban grass	Natal-hoenderspoor	87
Digitaria abyssinica	DIGSC	Abyssinian finger grass	Dunn's-vingergras	87
Digitaria longiflora	DIGLO	False couch finger grass	0-0-	88
lschaemum fasciculatum	ISCFA*	Border grass	Rooivleigras	88
Paspalum distichum	PASDI	Couch paspalum	Kweek-paspalum	89
Paspalum scrobiculatum	PASSC	Creeping paspalum	Dronkgras / Slootgras	89
Sedges - Watergrasses				
Bulbostylis hispidula	BULHI*	Slender sedge	Fynbiessie	91
			Tribicasic	~

Bulbostylis hispidula	BULHI*	Slender sedge	Fynbiessie	91
Cyperus esculentus	YPES	Yellow watergrass	Geeluintjie	91
Cyperus natalensis	CYPNA*			92
Cyperus rotundus	CYPRO	Purple watergrass	Rooiuintjie	92





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