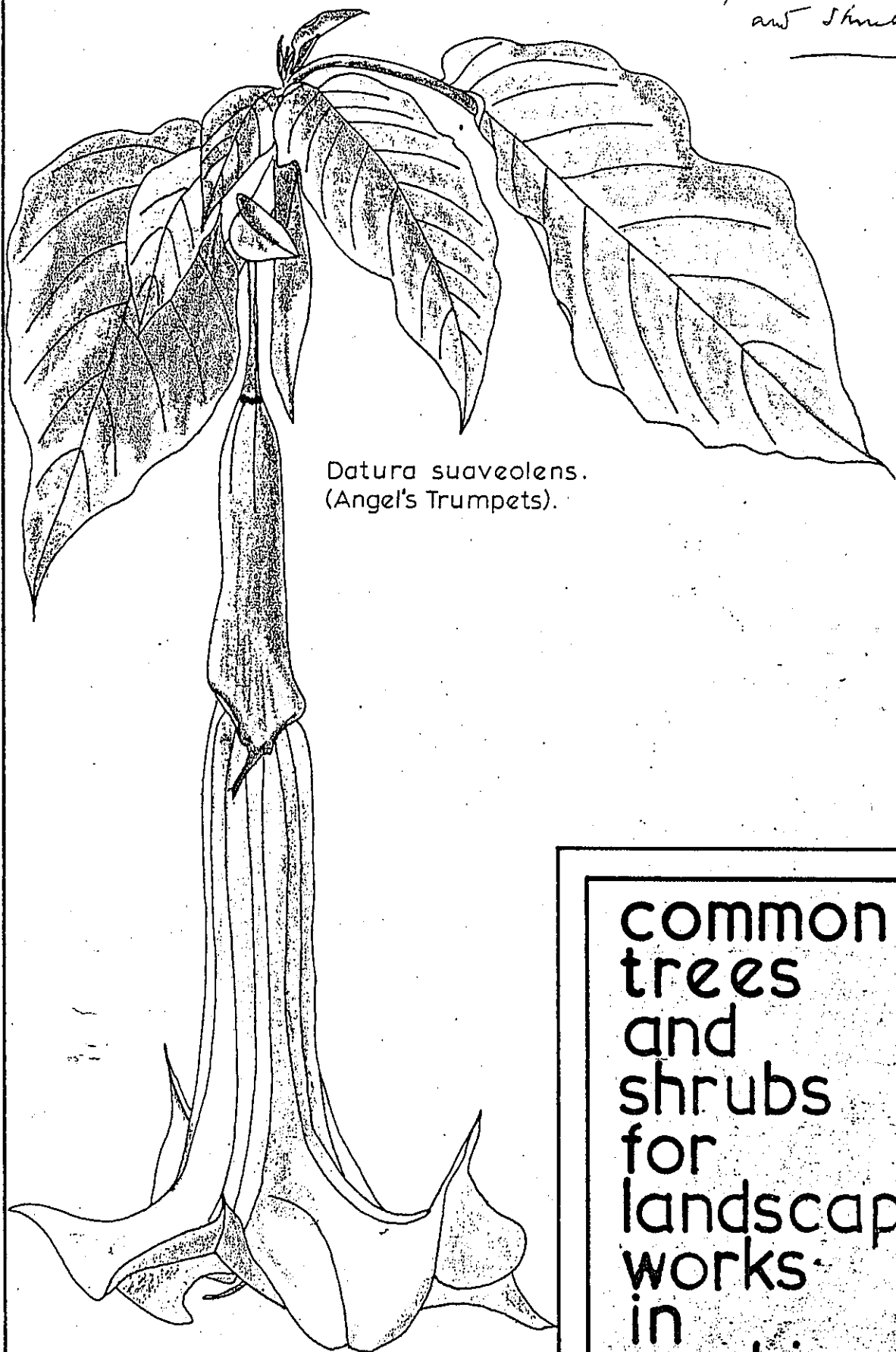


Mike BINGHAM.

Expert on Trees
and Shrubs.



Datura suaveolens.
(Angel's Trumpets).

common
trees
and
shrubs
for
landscape
works
in
zambia.

REPUBLIC OF ZAMBIA WORKS DEPARTMENT

BUILDINGS BRANCH

PO BOX 967 LUSAKA TELEPHONE 51966

Director WDMusonda MZIA Architect RIBA ARIAS FSA Scot

INTRODUCTION:

The purpose of this booklet is to give guidelines and suggestions to Architects and interested persons alike, as to those trees and shrubs that are suitable and commonly used for landscape works in Zambia.

2.00 Initially 40 sheets have been prepared though it is hoped that this will be supplemented in the future. The choice of plant material in the Tropics available for landscape works is enormous. In selecting this mere 40 trees and shrubs I make no apologies for this being done on a personal preference basis.

3.00 Most of the plants recommended can be successfully grown in any part of Zambia. Before including it in a design however have a look around the neighbouring environs. If it grows well roundabout, this is a good measure of its suitability for your design.

4.00 The procedure for planting is detailed in the GENERAL SPECIFICATION (Interim Metric Edition) and should be strictly adhered to. The successful establishment of the plant is pre-requisite and conditions should be made as favourable as possible to afford the plant every opportunity to successfully establish.

5.00 As a rough indicator, trees should be planted 7 metres apart and shrubs 1m. apart. Remember the plant will grow, therefore look at established specimens so that you can appreciate how they will fit into your design.

6.00 Once planted, the plant cannot be forgotten. Particularly in Zambia with its extreme of Wet and Dry Seasons, watering will be essential. Pruning, weeding, protection against insects and disease and fertilizing will also be necessary. Provision must therefore be made to ensure subsequent maintenance.

7.00 If in doubt, consult a Landscape Architect or Horticulturalist in P.U.D. for their advice.

8.00 Lastly my thanks to Mr. Ulayi for his technical assistance in preparing the drawings.

John Ely,
Landscape Architect.
For/DIRECTOR OF BUILDINGS.

1st April, 1976

TREES AND SHRUBS FOR LANDSCAPE WORKS IN GAMBIA.

CONTENTS.

TREES

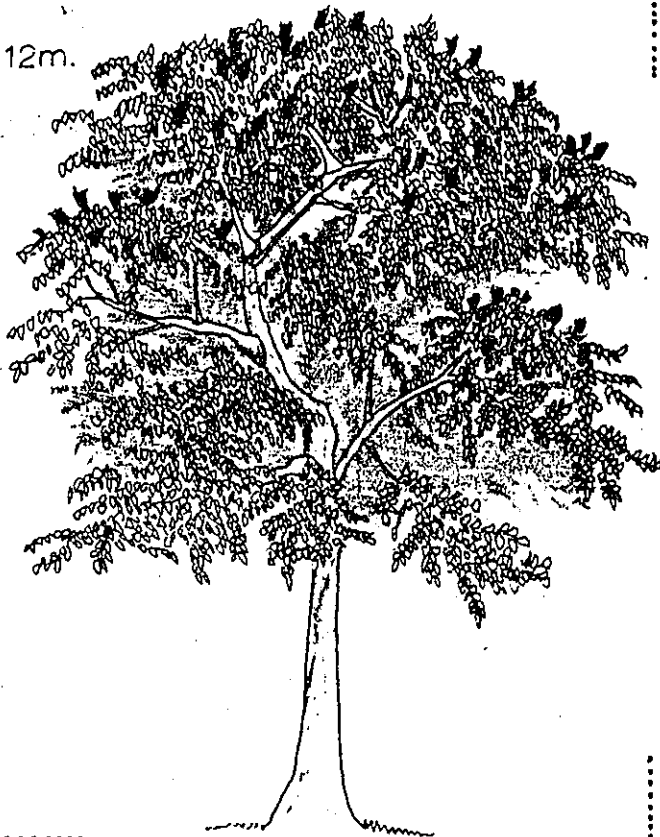
01	SPATHODEA campanulata	Flame Tree
02	BAUHINIA variegata	Orchid Tree
03	CALLISTEMON citrinus	Bottlebrush
04	CASSIA spectabilis	Golden Cassia
05	DELONIX regia	Flamboyant
06	JACARANDA mimisifolia	Jacaranda
07	SOLANUM macranthum	Potato Tree
08	BOCCONEA frutescens	-
09	TRICHILLIA emetica	Musikili
10	TOONA ciliata	Toon Tree
11	GHELIINA aborea	Y-mané
12	IPOMOEA aborescens	Tree Convolvulus
13	PLUMERIA rubra	Frangipani
14	STENOLOBIUM stans	Yellow Bells
15	DRACAENA draco	Dragon Tree
16	FICUS elastica	Rubber Tree
17	GREVILLEA robusta	Silky Oak
18	KEGILIA africanum	Sausage Tree
19	MELIA azedarach	Indian Bead Tree
20	EUCALYPTUS citriodora	Lemon Scented Gum

SHRUBS

21	THEVETIA peruviana	Yellow Oleander
22	ACALYPHA species	-
23	MALVAVISCUS mollis	Firedart Bush
24	BOUGAINVILLEA species	-
25	CASSALPINIA pulcherrima	Pride of Barbados
26	BIXA orellana	Annato
27	DATURA suaveolens	Angels Trumpets
28	VITEX agnus-castus	-
29	EUPHORBIA cotinifolia	Copperleaf Bush
30	EUPHORBIA pulcherrima	Poinsettia
31	EUPHORBIA leucacephala	-
32	EUPHORBIA splendens	Christ Thorn
33	IBISUS rosa-sinensis	Shoeflower
34	CODIÆM variegatum	Croton
35	NERIUM oleander	Oleander
36	LAGEROSTROEMIA indica	Pride of India
37	BAMBUSA sp	Bamboo
38	AGAVE spp	Century Plant
39	JASMINUM sambac	Jasmine
40	SANCHEZIA nobilis	-

SHAPE

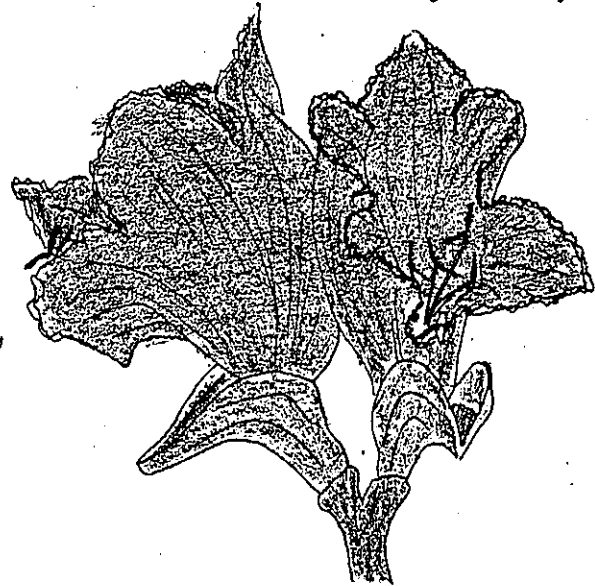
12m.



FLOWER

✓

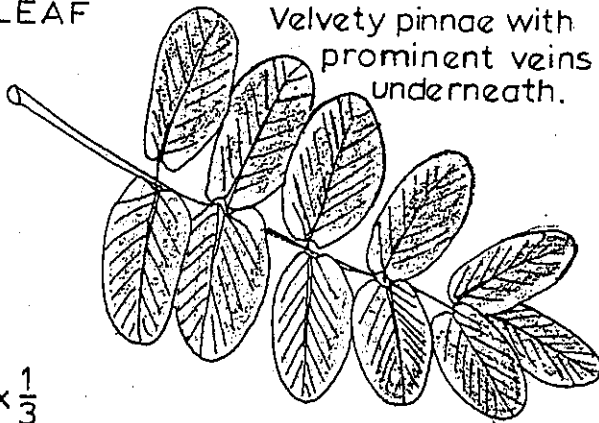
Flame coloured with crinkled petal margins. In flower from January to July.



$\times \frac{1}{2}$

LEAF

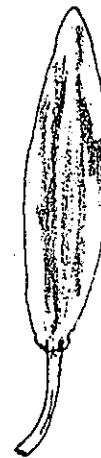
Velvety pinnae with prominent veins underneath.



$\times \frac{1}{3}$

FRUIT.

Green pod turning brown borne erect on terminal stalks.



$\times \frac{1}{2}$

GROWTH

A fast growing tree that is indigenous to Zambia.

CLIMATE

Prefers a humid regime. Deciduous unless watered during the Dry Season.

PROPAGATION

From root suckers or seed.

USES.

For roadside planting or as a background foil for lighter and smaller plant material. Prone to storm damage which spoils its shape.

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BUILDINGS BRANCH

SPATHODEA campanulata

DRG No

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Flame tree

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Drawn

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SHEET 01

SHAPE

10m.



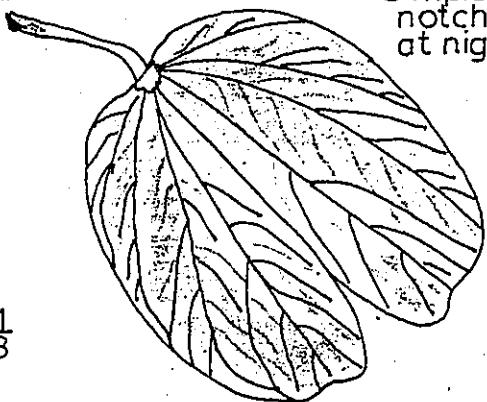
FLOWER

Pink-purple colouring. It is in flower from January to May. Scented.



$\times \frac{2}{3}$

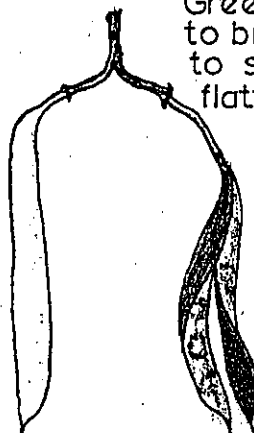
LEAF



$\times \frac{1}{3}$

Simple and notched. Fold at night

FRUIT



$\times \frac{1}{5}$

Green pod drying to brown. Dehisces to scatter hard flattened seeds.

GROWTH. Originates from the sub-Himalayan tract. A small to medium size tree that is fairly quick growing.

CLIMATE. Prefers a milder and more humid regime than is found here in Zambia. But nevertheless does very well.

SOILS. Prefers a well drained loam.

PROPAGATION. From seeds. Train as a single stem.

USES. This graceful tree is best used as an ornamental, though it may also be used for roadside planting. It may also flower during the dry season.

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BUILDINGS BRANCH

BAUHINIA variegata

DRG No

ST 548 12

Orchid tree

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SHEET 02

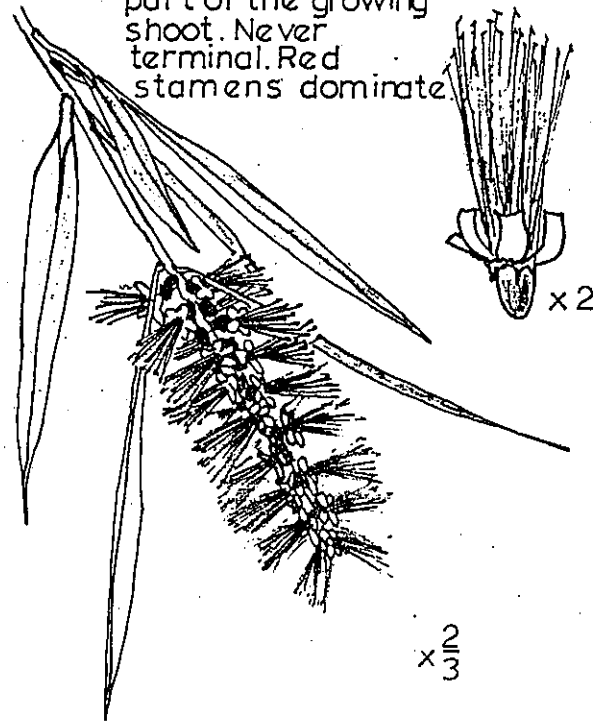
SHAPE

7m

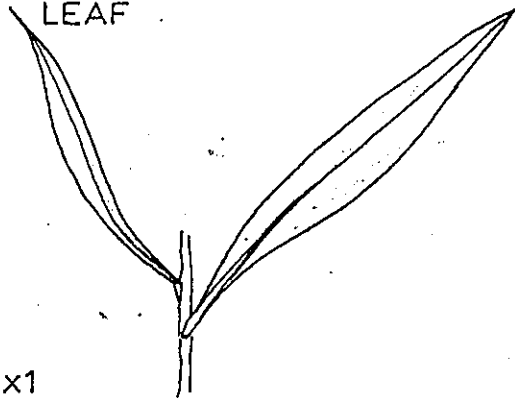


FLOWER

Borne in a spike that is part of the growing shoot. Never terminal. Red stamens dominate.

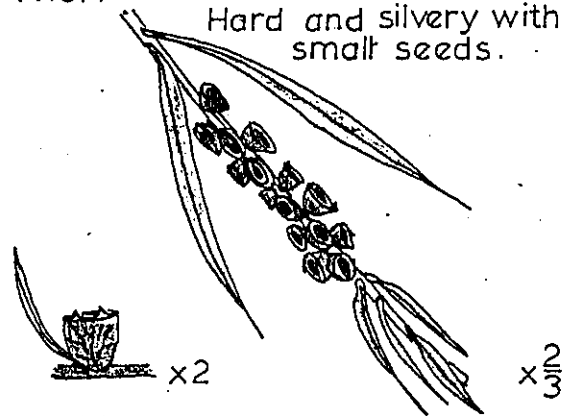


LEAF



FRUIT

Hard and silvery with very small seeds.



GROWTH. This indigenous tree of Australia has a weeping habit and is moderately fast growing.
CLIMATE. Prefers a moist regime.
SOIL. Rich moist well drained loam.
PROPAGATION. From cutting or seed.
USES. Good specimen trees. Best when planted in groups as a background to a shrub border. Gives a good willow effect beside water. Looks effective in front of larger trees or with foliage seen against walls

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CALLISTEMON citrinus

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Bottlebrush tree..

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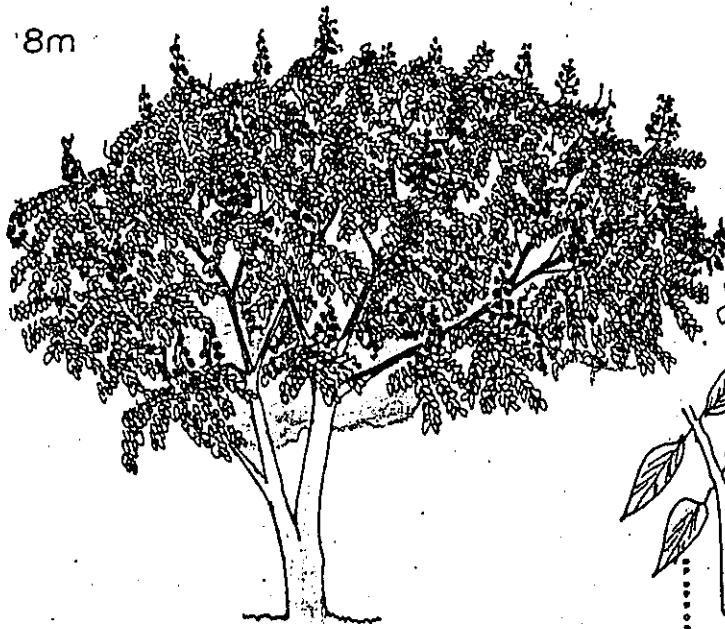
A4 SL 1971

SHAPE

FLOWER

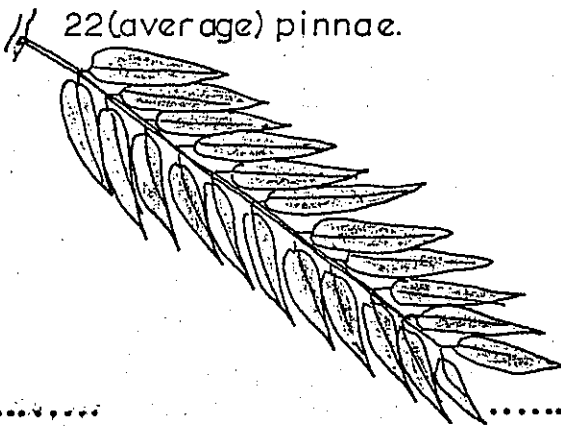
Bright yellow in terminal racemes. In flower from February to May.

8m



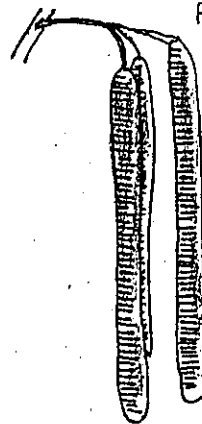
LEAF

22 (average) pinnae.



FRUIT

Long pendulous seed pods.



GROWTH. A fast growing spreading tree though not very tall. Nearly deciduous.

CLIMATE. Wide range tolerated.

SOIL. Prefers a moist well drained loam.

PROPAGATION. From seed.

USES Best as an avenue tree. Look particularly impressive when planted with *Spathodea* as the flowering periods are the same. Also effective when planted as grouped specimens. It gives good spreading shade for car parks. The roots are seldom troublesome but it is very susceptible to storm damage.

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BUILDINGS BRANCH

CASSIA spectabalis.

DRG No

STD 548 12

Golden Cassia

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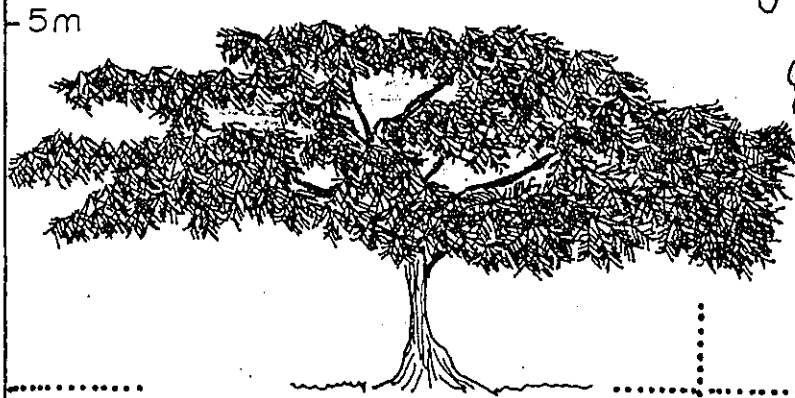
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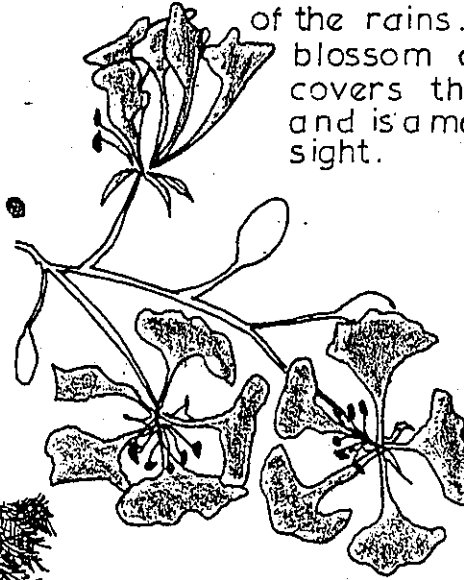
19 2 76

SHAPE



FLOWERS

A brilliant flame colour. It blooms at the beginning of the rains. The blossom completely covers the tree and is a magnificent sight.



x 2/3

LEAF.

Fine feathery foliage.



x 1/3

FRUIT.

Long flattened hard brown seed pod.



x 1/4

GROWTH. It can reach 10m but is known for its spreading habit. Moderately quick growing. Madagascan origin.

CLIMATE. Tolerates a wide range.

SOIL. Prefers a sandy soil.

PROPAGATION. From seed. Boil just sufficiently to soften outer testa.

USES. Recommended for roadsides, broad avenues and car parks where its spreading canopy is particularly effective. Planting distances should be generous, 10m or more.

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DELONIX regia

Flamboyant.

DRG No

STD 548 12

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SHAPE

FLOWER

Violet blue tubular flowers. held in clusters. In Sept- to October they completely cover the tree.

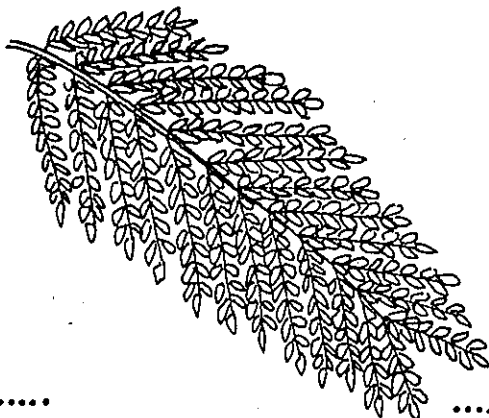
15m



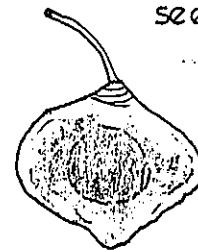
x1

LEAF. Feathery

FRUIT. Papery seeds are held in a green ripening to brown seed pod.



x $\frac{1}{4}$



x $\frac{1}{2}$

GROWTH. From Central and South America. Fast growing. Need constant pruning when young.

CLIMATE Prefers the marked dry season climatic regime of Zambia.

SOILS Preference for lighter soils.

PROPAGATION. Easily from seed.

USES Recommended for roadside planting or planting in open spaces. Roots can be troublesome so do not plant too close to buildings etc. Deciduous. Branches have a silvery hue when bare.

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BUILDINGS BRANCH

JACARANDA mimisifolia.

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Jacaranda.

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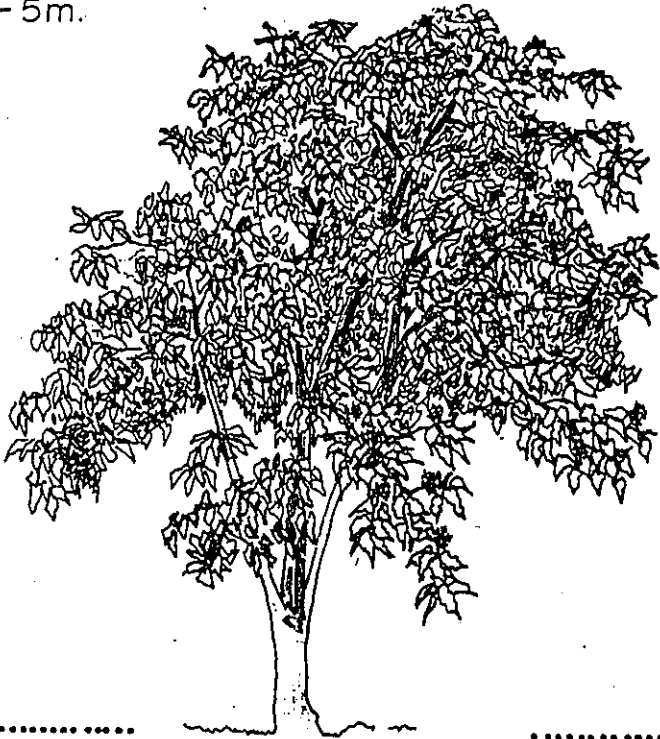
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SHAPE

5m.



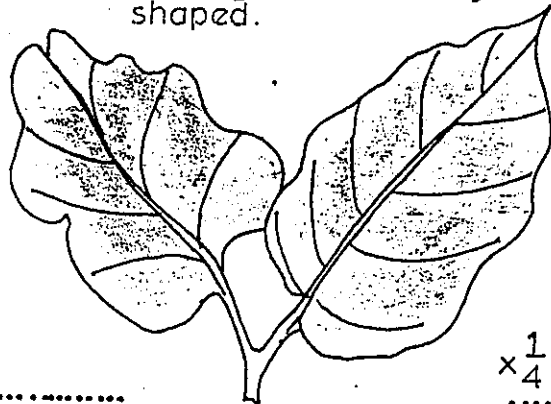
FLOWER.

Large blue-purple-white flowers appear on the tree January to March.



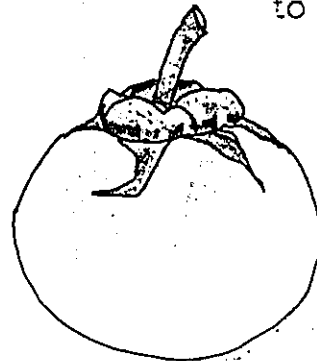
x $\frac{2}{3}$

LEAF. Dark green variably shaped.



x $\frac{1}{4}$

FRUIT. Tomato-like. Green turning to yellow.



x $\frac{2}{3}$

GROWTH. A fast growing small tree.

CLIMATE No real preference.

SOIL Prefers a good loam.

PROPAGATION. From seed

USES. A good quick growing screen for boundaries. Good for small confined areas.

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BUILDINGS BRANCH

SOLANUM macranthum

DRG No

STD 548 .12

Potato tree.

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SHEET 07

SHAPE

5m



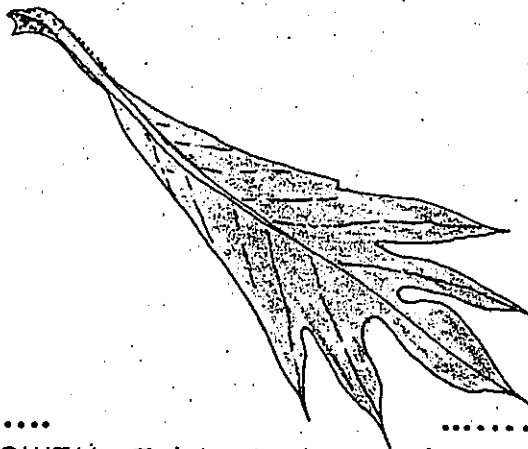
FLOWER

Delicate inflorescence bearing insignificant flowers. Stamens most evident being creamy and very fragile.



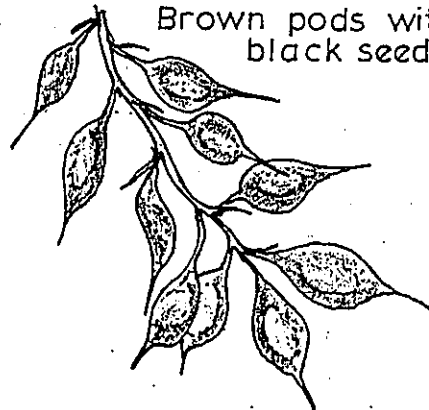
x1

LEAF Variable.



x1/3

FRUIT. In grape-like bunches. Brown pods with a single black seed.



x1

GROWTH. Fairly fast growing.

CLIMATE. Does well in Zambia.

SOILS. Appears to prefer a lighter soil.

PROPAGATION. Easily propagated from seed.

USES. A small tree that can decoratively fill in those spaces between buildings where larger trees would cause problems. It can be safely planted near drainage features. It also looks effective in rockeries.

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BUILDINGS BRANCH

BOCCONEA frutescens.

DRG No

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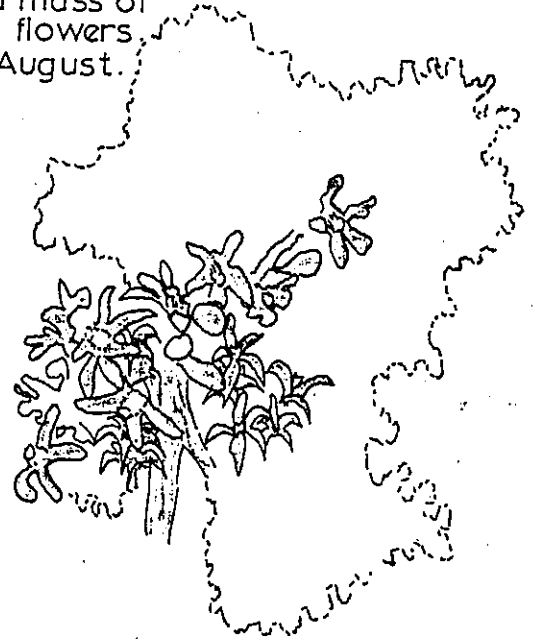
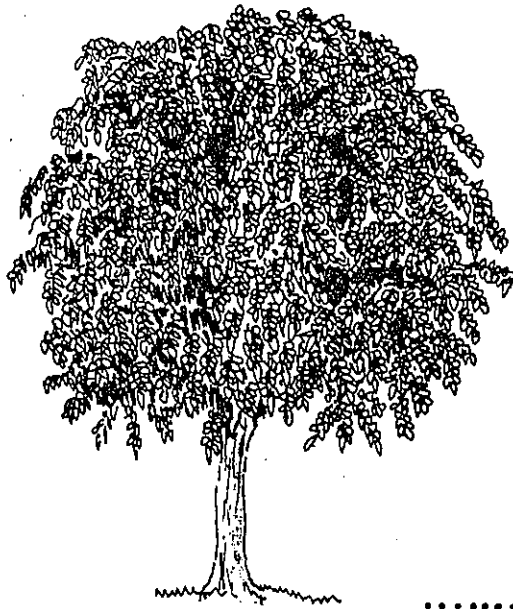
SHEET 08

SHAPE

FLOWER

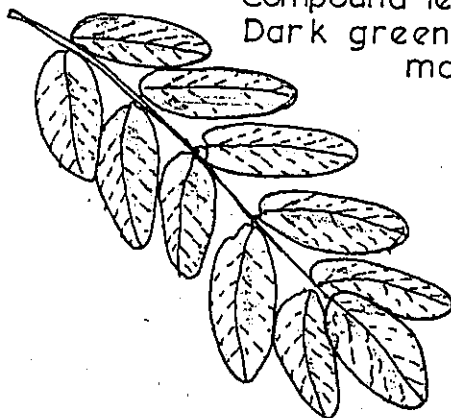
Inflorescence fairly insignificant being a mass of yellow flowers during August.

10m



x1

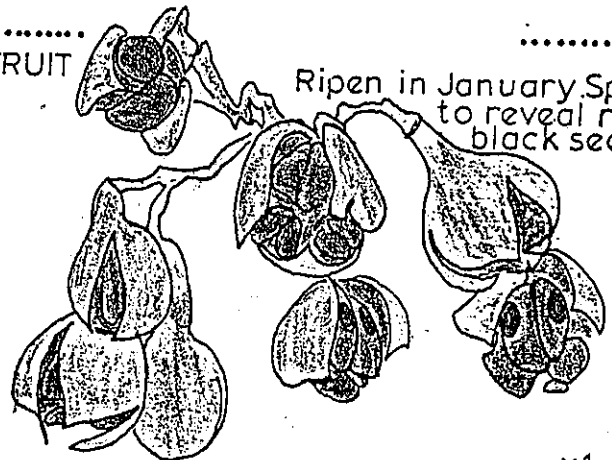
LEAF



x 3

Compound leaves. Dark green when mature.

FRUIT



x1.

Ripen in January. Split to reveal red black seeds

GROWTH. Indigenous to Zambia, especially Gwembe and Luangwa river valleys. Semi-evergreen and fast growing.
CLIMATE. Preference for hot climate but with subsurface water available.
SOILS. Deep rich alluvial soils.
PROPAGATION. From seed.
USES. Its deep heavy shade makes this an excellent shade tree. Also good as an avenue tree.

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TRICHILIA emetica.

Musikili.

DRG No

STD 548

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Scale

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Date

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SHEET 09

SHAPE

FLOWER

Insignificant feature.
The pollen dusts the ground beneath the tree profusely.

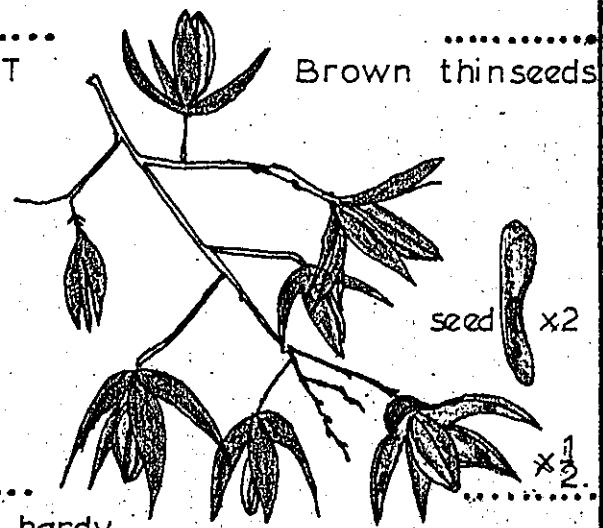
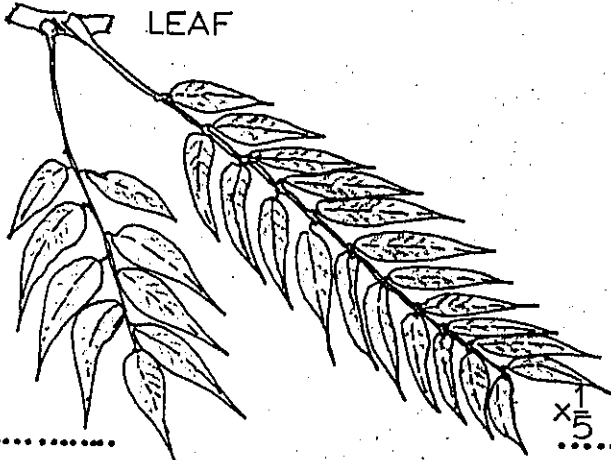
15m.



LEAF

FRUIT

Brown thinseeds



GROWTH. A fast growing tree also very hardy.

CLIMATE Tolerates a wide range.

SOIL. No preference.

PROPAGATION. Sets seed very easily. In fact can be rather a nuisance as it colonises any neglected area, ditches etc.

USES. Good as a shade tree and for avenues. Also as a background foil for more interesting planting. Roots are vigorous so avoid planting it near buildings manholes etc. Can grow very tall.

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BUILDINGS BRANCH

TOONA ciliata.

Toon tree.

DRG No

STD 548 12

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Arch/Eng

j. e.
Drawn

Scale

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Date

24 2 76

SHAPE

FLOWER

Not illustrated



12m



LEAF



dark green.
underside
has a
silvery hue.

FRUIT.

Yellow rounded fruits turning black, each contains a single seed.

1
x4

GROWTH. Of Indian origin this is a fast growing tree.

CLIMATE. Good tolerance to a wide range.

SOIL. Prefers a moist fertile light soil

PROPAGATION. From seed. They lose vitality easily however.

USES. Its lack of spectacular flowering is well compensated for by its constant leaf fluttering during the slightest breeze. It is also very fast growing so gives quick effect. Excellent for roadside planting, providing shade or as a shelter belt. With the latter an added advantage is it can be selectively thinned for fuelwood.

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BUILDINGS BRANCH

GMELINA arborea.

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Yemane.

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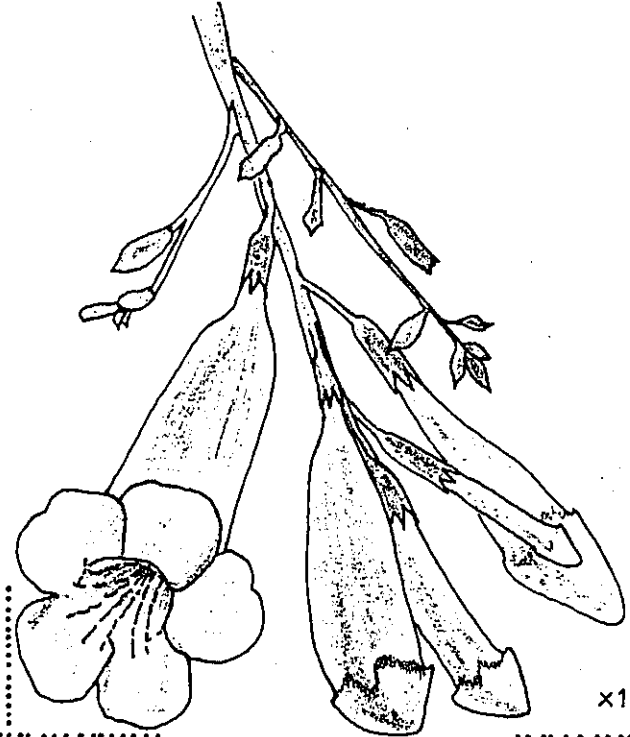
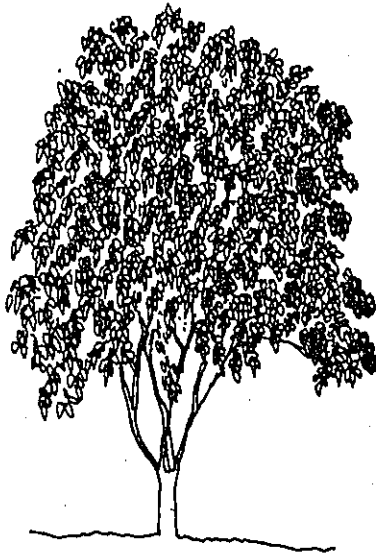
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SHAPE

FLOWER

Clusters of bright yellow trumpet flowers. Almost always in flower particularly Jan-March.

4m.



LEAF

Light green pinnate leaf

FRUIT

Green-brown seed pod with papery seeds.



GROWTH: A strong growing shrub originally from Central America and West Indies.

CLIMATE: Prefers full sun.

SOIL: Withstands dry conditions well though it needs a rich soil and regular feeding.

PROPAGATION: Normally from seed which are produced in abundance.

USES: Excellent as a background shrub in a shrub border, as a specimen plant in confined places or as a hedge plant.

NOTE: Formerly called *TECOMA STANS*.

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BUILDINGS BRANCH

STENOLOBIUM Stans

DRG No

STD 548

12

Yellow Bells/Yellow Elder

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L 1971

SHAPE

5m



GROWTH. A slow growing tree belonging to the Agavaceae family. Originally from the Canary Islands it is reputedly long lived.

CLIMATE. Hot sun. Withstands drought.

SOIL. No preference.

PROPAGATION. From seed.

USES. A most ornamental and tropical tree. It looks particularly effective when plant in rockeries or when it is shown off against the white wall of a building. The name Dragon Tree is derived from the red resinous juice exuded from the cracks in the trunk of the tree which will burn with a bright flame.

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BUILDINGS BRANCH

DRACAENA draco.

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Dragon Tree.

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Drawn

Scale

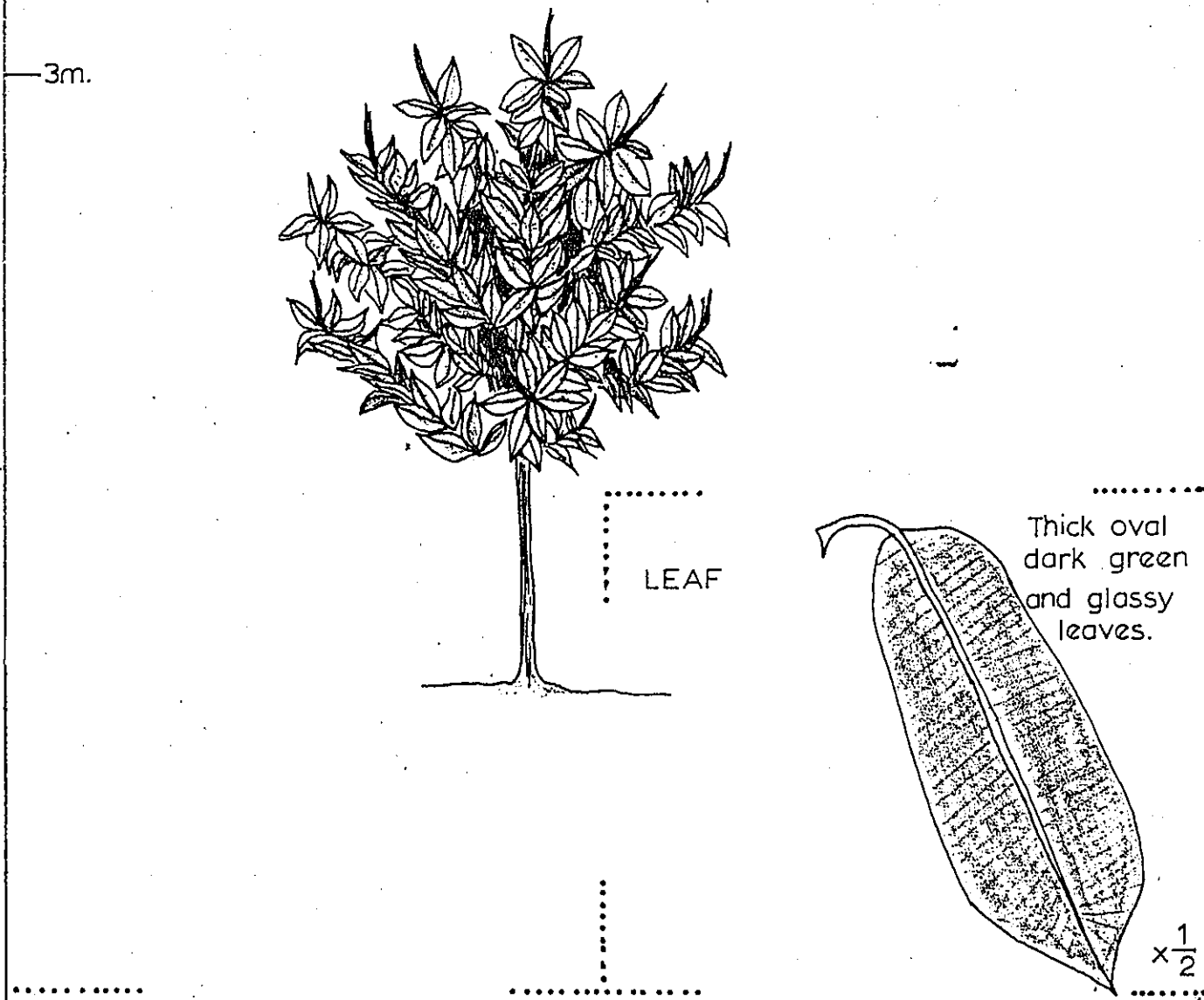
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SHAPE

Young tree pruned to standard shape



GROWTH: A very large tree developing a spread of 15m.. Stem becomes buttressed when old with aerial roots. Roots can be troublesome so give it plenty of space.

CLIMATE: Hot climate.

SOIL: Rich loam.

PROPAGATION: Rarely seeds normally grown by air layering.

USES: A magnificent shade tree and essential for high quality landscape scheme. Good for car parks, parks or as a specimen tree. Can be used for decorative pot work. Note the superb specimen in Lusaka Hotel.

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 PO BOX 967 LUSAKA Telephone 51966 **BUILDINGS BRANCH**

FICUS elastica decora	DRG No		STD	548	12	
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Rubber tree			na :	11	3	76

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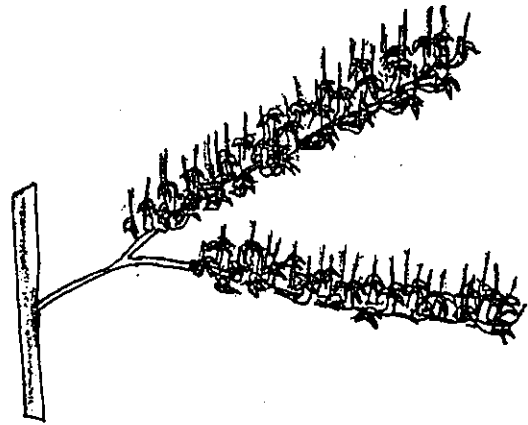
SHAPE

—20m.



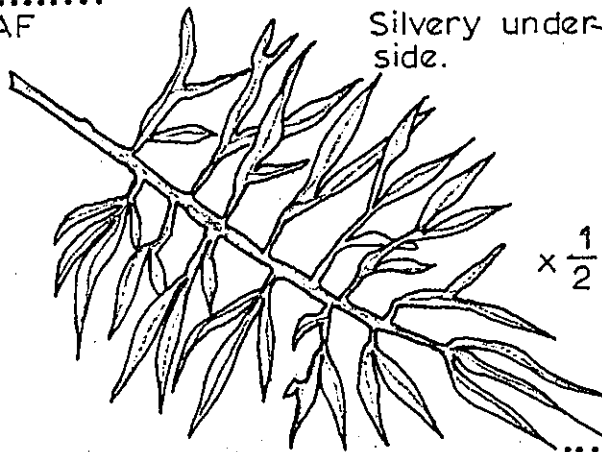
FLOWER

Orange/Yellow clusters held on a raceme. Flowers September-November.



$\times \frac{1}{2}$

LEAF

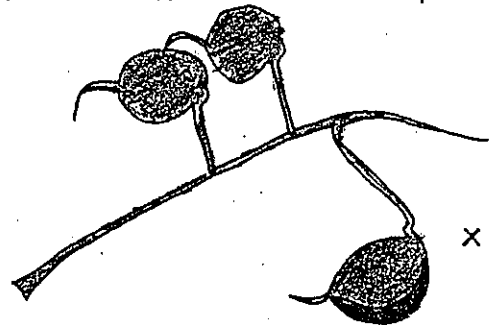


Silvery under-side.

$\times \frac{1}{2}$

FRUIT

Blackened seed pods



$\times 1$

GROWTH: A fast growing large tree indigenous to Australia Evergreen.

CLIMATE: Prefers full sun and light.

SOIL: Rich soil preferably slight acidic. Must have good drainage.

PROPAGATION: From seed.

USES: This graceful tree is very decorative particularly when the leaves flutter in the breeze. Uniformly growing so good for avenue planting or as a tall tree element in large landscape schemes.

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PO BOX 967 LUSAKA Telephone 51966

BUILDINGS BRANCH

GREVILLEA robusta.

DRG No

STD 548 12

Silk oak

j.ely
Arch/Eng

j.e
Drawn

Scale

Date

na :

11 3 76

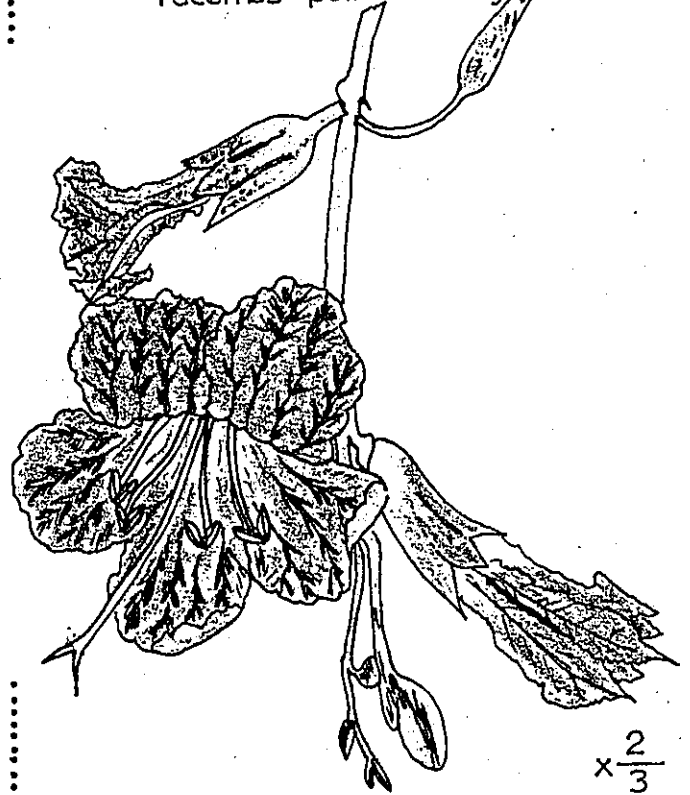
SHAPE

—6m.



FLOWER

Dull maroon hanging in graceful racemes pollinated by bats.



$\times \frac{2}{3}$

LEAF

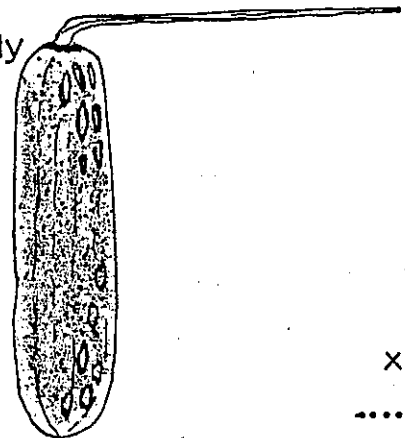
Tough leatherly leaves



$\times \frac{1}{3}$

FRUIT

Hard woody sausage.



$\times \frac{1}{4}$

GROWTH. Indigenous to Africa. Slow growing and variable species.

CLIMATE. Drought resistant, and suitable for hot Zambian climate.

SOIL. Light dry soils preferred.

PROPAGATION. From seed.

USES. Not commonly planted but should be considered in landscape schemes, particularly in general tree planting schemes, as it is indigenous to Zambia. A good roadside tree.

REPUBLIC OF ZAMBIA WORKS DEPARTMENT
PO BOX 967 LUSAKA Telephone 51966

BUILDINGS BRANCH

KIGELIA africana

Sausage tree

DRG No

j.ely
Arch/Eng

j.e
Drawn

STD	548	12	
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Scale	Date
na:	16 03 76

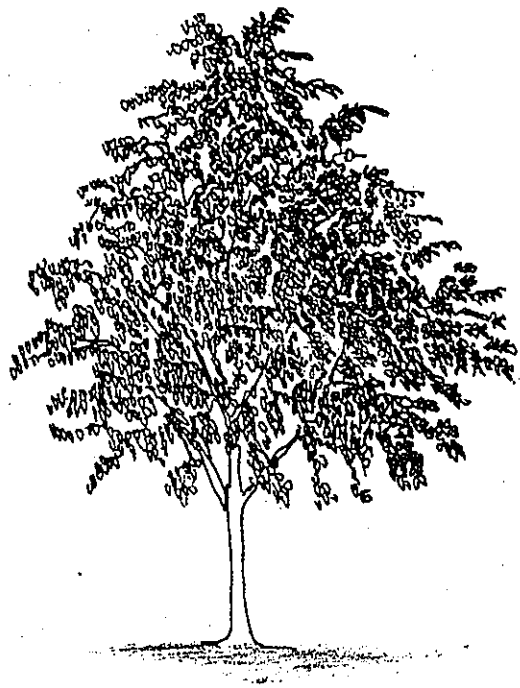
A4
KSL 1971

SHEET 18

SHAPE

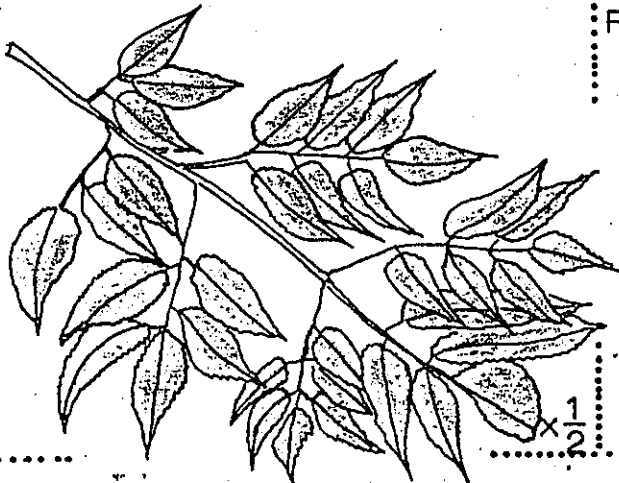
FLOWER

8m.

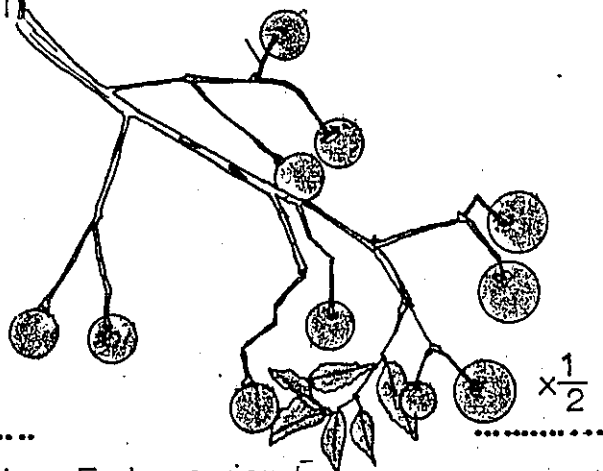


A mass of small purple and white flowers scented.

LEAF



FRUIT



GROWTH. Deciduous medium sized delicate tree. Fast growing.

CLIMATE. Tolerates a wide range.

SOIL. Drought resistant. Prefers a light soil with good drainage.

PROPAGATION. From seed.

USES. A delicate tree. The fruit is held on the tree whilst it is bare in winter. Useful for mixed planting or in groups in general landscape works. Can be planted near buildings as roots are not troublesome and flowers have a sweet scent.

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BUILDINGS BRANCH

MELIA azedarach

DRG No

STD 548 12

Persian lilac / Bead tree

j.ely Arch/Eng
j.e Drawn

Scale

Date

no :

15 03 76

SHAPE

—20m.

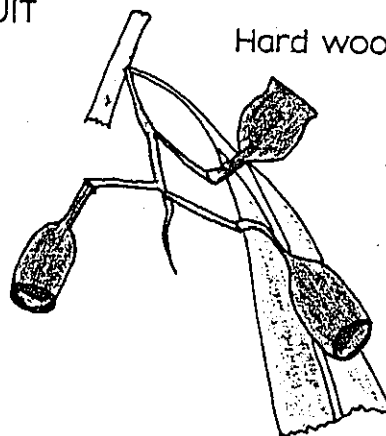


LEAF

Dry stiff leaves lemon scented

FRUIT

Hard woody capsule



GROWTH. Fast growing tall tree from Australia.

CLIMATE. Drought resistant, hot sunny climate.

SOIL. Well drained gravels preferably fertile.

PROPAGATION. From seed

USES. Good as a windbreak as it looks well in clumps. Or as an avenue tree roots can be troublesome so avoid planting near buildings. Roots are grass-feeders and prevents grass growing under the tree. Give plenty of room.

REPUBLIC OF ZAMBIA WORKS DEPARTMENT
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BUILDINGS BRANCH

EUCALYPTUS citriodora

DRG No

STD 548

12

Lemon scented gum

j.ely
Arch/Eng

j.e
Drawn

Scale

Date

na :

15 | 03 | 76

971

SHEET 20

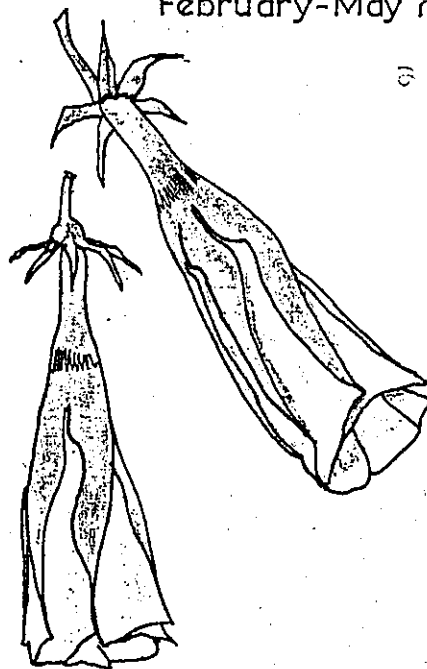
SHAPE

5m.



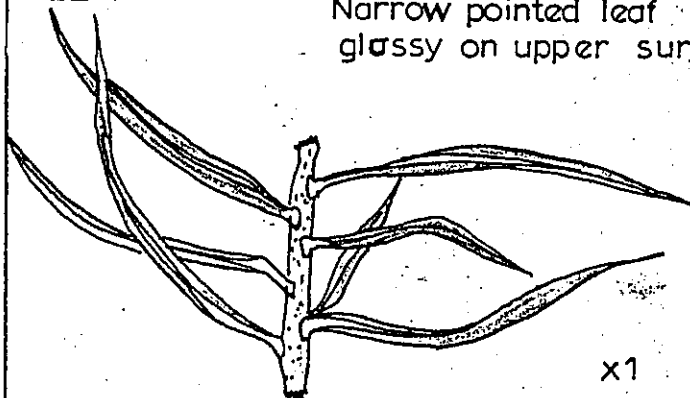
FLOWER

Bright yellow tubular flowers petal fused to give a green tube flower February-May mainly.



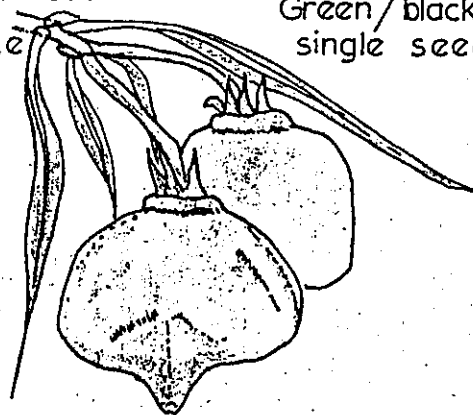
LEAF

Narrow pointed leaf glassy on upper surface



FRUIT

Green/black with single seed.



GROWTH. A fast growing bush from South America.

CLIMATE. Warm, frost, free climate.

SOIL. Requires good drainage.

PROPAGATION. From seed that often have self germinated under the mother plant.

USES. Note all parts are poisonous, but very useful as a hedge plant and can be trimmed to any shape. Good when mixed as an understorey for taller trees.

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BUILDINGS BRANCH

THEVETIA Peruviana

DRG No.

STD 548 12

Milk Bush/Yellow Oleander

j.ely
Arch/Eng

je
Drawn

Scale

Date

na :

2 3 76

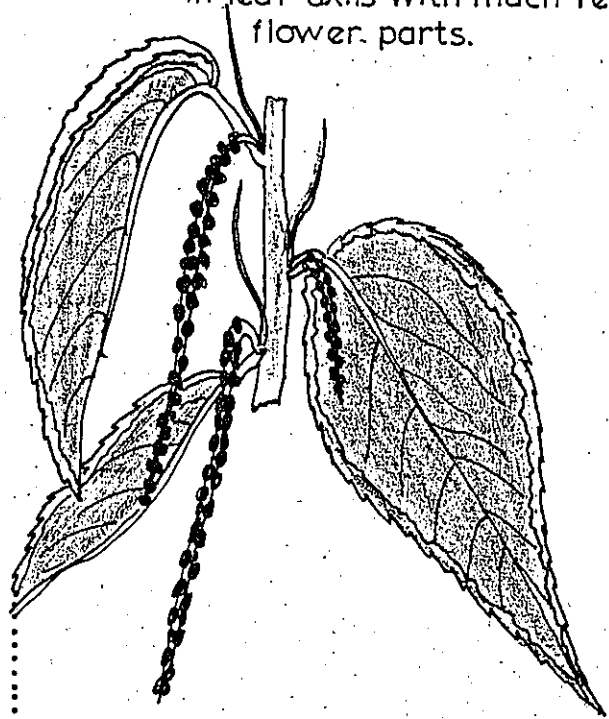
SHAPE

—1m.



FLOWER

Insignificant compared to foliage effects. A "catstail" borne in leaf axils with much reduced flower parts.

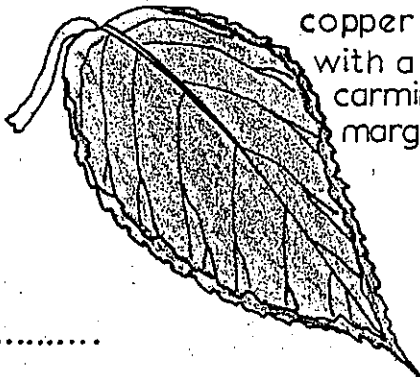


x1

LEAF

(a) *Acalypha wilkensis* marginata

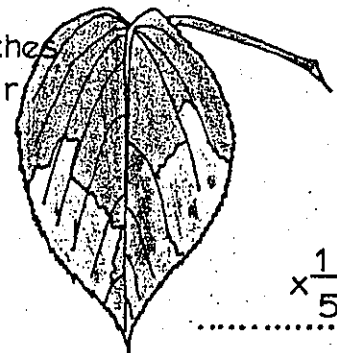
copper leaf with a rosy-carmine serrated margin.



x $\frac{1}{2}$

(b) *Acalypha wilkensis* macrophylla

copper leaf with irregular patches of red-pink. Larger leaves



x $\frac{1}{5}$

GROWTH. Both types are fast growing. Type(a) can reach 5m. in height. Originally from polynesia.

CLIMATE. Frost free sunny locations.

SOIL. Rich well drained soils.

PROPAGATION. Very easily from cuttings.

USES. Both are beautiful shrubs grown solely for foliage effects. Good in shrub borders. Can be planted in blocks and clipped as a hedge or table. Very commonly grown. Prone to scale attack if not watered in dry season.

leaves of a plant

Weak

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BUILDINGS BRANCH

ACALYPHA sp.

DRG No

STD 548 12

Scale

Date

j.ely
Arch/Eng

j.e
Drawn

na :

3 3 76

SHAPE

FLOWER

Drooping whorl of partially closed red petals.

1m.

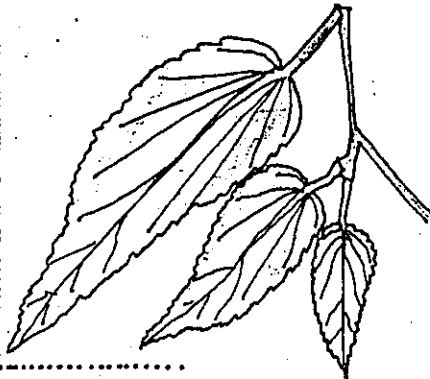


LEAF

Light green serrated

FRUIT

Insignificant feature



x 1/2

GROWTH. Fast growing lax semi fastigate shrubs from Mexico.

CLIMATE. Tropical sunny aspect.

SOIL. Well drained loam.

PROPATION. From cuttings

USES. A ^(not exact) lax shrub rather prone to disease and catapillar attacks. Best in mixed border with other shrubs. Red flowers shown off well against a background of Acalypha.

lying face down

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BUILDINGS BRANCH

MALVA VISCUS mollis

DRG No

STD 548 12

Firedart Bush

j. ely
Arch/Eng

j.e
Drawn

Scale

na :

Date

3 3 76

A4
SL 1971

SHEET 23

SHOOT: The flowers are actually bracts. Common colour range - purple / red / orange / brick red / pink / white.



GROWTH:- A semi-climber originating from South America and named after the French explorer Louis Bougainville. A fast grower.

CLIMATE:- Prefers hot dry sunny conditions.

SOIL:- Tolerates a wide range. Should be free draining. Mulch in the dry season.

PROPAGATION:- Very easily strikes from cuttings.

USES:- Perhaps the most widely known plant of the tropics. It is extremely versatile and can be grown as a hedge, bush or climber. It can be massed to give a "bougainvillea table." Bougainvillea is also ideal for softening the harsh effects of security fences, yet retains security because of its spines. Strikingly effective if it is allowed to scramble up into the branches of a tree. Planted in shade it produces too much vegetative growth. The flowering bracts are produced at the end of new shoots these can be encouraged by judicious pruning. Choose plants when first in flower to obtain desired colours.

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PO BOX 967 LUSAKA Telephone 51966 **BUILDINGS BRANCH**

Bougainvillea

glabra
spectabilis
elegans

DRG No

STD 548 12

j.ely

je

Scale

Date

Arch/Eng

Drawn

na :

3 3 76

SHAPE

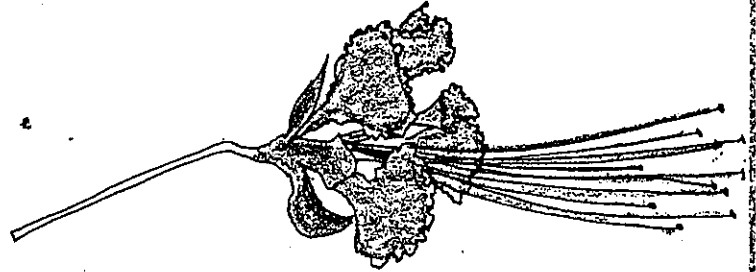
A coppiced example

-2m.



FLOWER

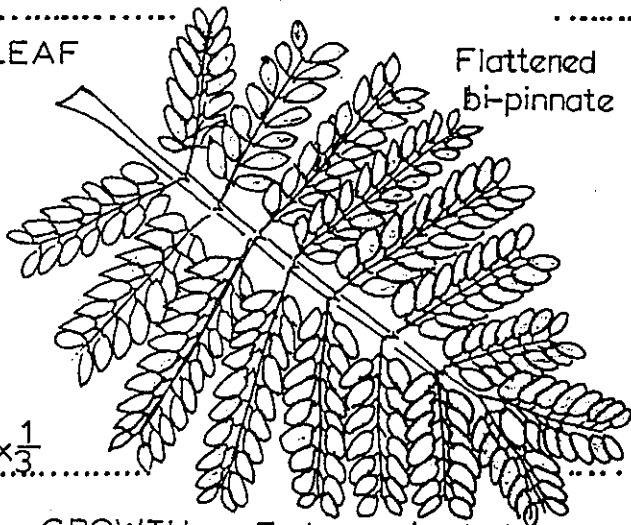
Borne on upright racemes. Flowers are orange and red with drooping red stamen. In flower February onwards.



x1

LEAF

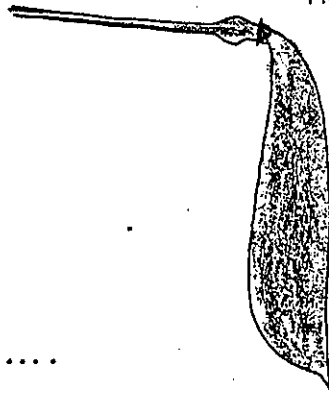
Flattened bi-pinnate



x $\frac{1}{3}$

FRUIT

Green to brown borne behind flowering raceme



x $\frac{1}{2}$

GROWTH:- Fast growing but rather untidy shrub. Best to prune hard each year to keep its shape.

CLIMATE:- Hardy. Best in the full sun.

SOIL:- Well drained loam soil.

PROPAGATION:- From seed normally.

USES:- A rather untidy shrub unless pruned, but extremely decorative. Plant as a specimen or at the back of the shrub border or in a screen with other species such as Tecoma, Poinsettia, Thevetia etc..

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BUILDINGS BRANCH

CAESALPINIA Pulcherrima

DRG No

STD 548

12

Pride of Barbados

j.ely
Arch/Eng

je
Drawn.

Scale

na :

Date

3 3 76

SHAPE

Small specimen

FLOWER

Flowers March-May
Pink flowers and red buds which are very attractive.

1m.



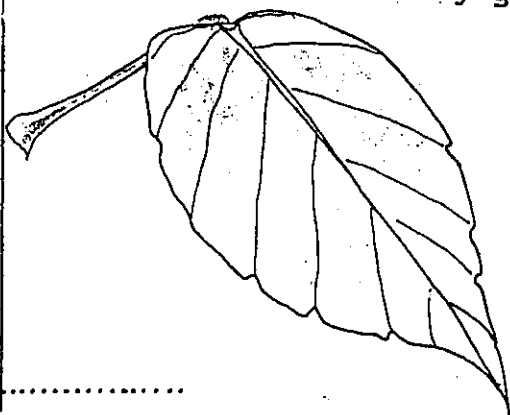
x1

LEAF

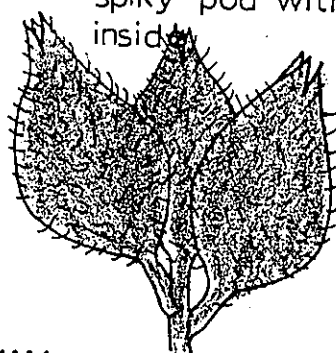
Shiny green leaf

FRUIT

A red pod turning to brown spiky pod with small red seed inside



$\times \frac{1}{2}$



x1

GROWTH :- Quick growing. If left unpruned can reach the dimensions of a small tree originally from the West Indies.

CLIMATE :- Hardy. Does well in Zambia.

SOILS :- Prefers an acidic soil and plenty of water.

PROPAGATION :- A very attractive plant which always gives good effect whatever time of the year. It can be trimmed to give a good hedge in 3-4 years or can be used as a specimen plant in shrub borders or awkward corners.

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BUILDINGS BRANCH

BIXA Orellana

DRG No

STD 548 12

Anatto or Lipstick plant

j.ely
Arch/Eng

je
Drawn

Scale

Date

na :

4 3 76

SHAPE

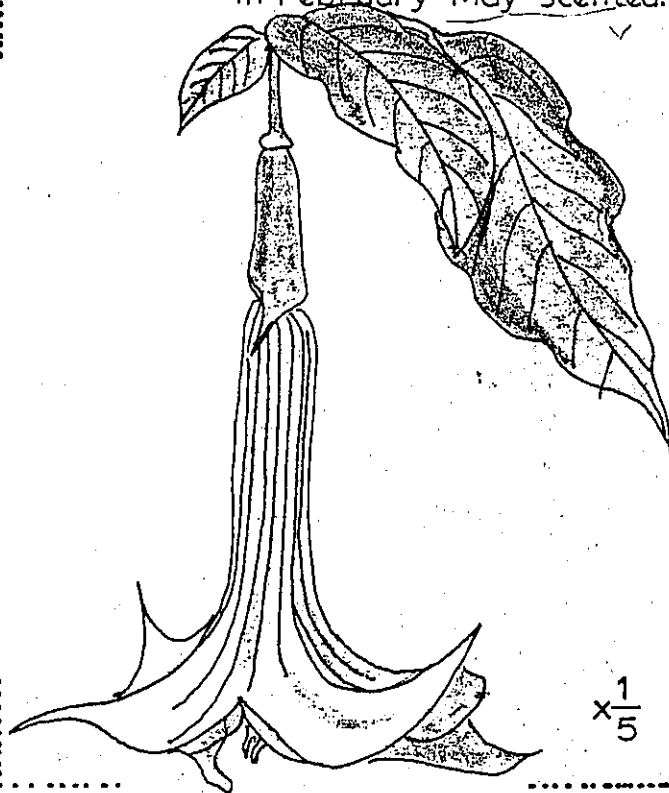
Small specimen

—1.5m.



FLOWER

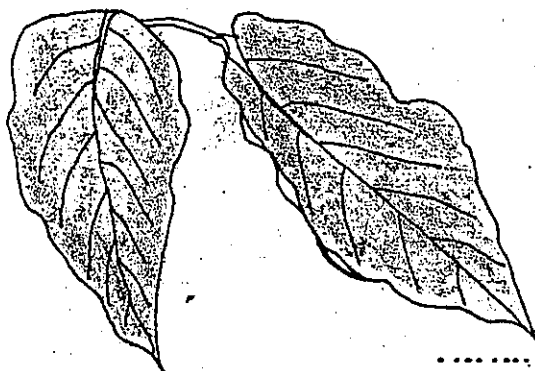
Large white/yellow flowers in February-May scented.



x 1/5

LEAF

Soft light green



x 1/3

FRUIT

An insignificant feature

GROWTH:- Originally from Mexico. Can reach 3-5m. Woody.

CLIMATE:- Hardy. Deciduous in dry season. Prefers semi-shade.

SOIL:- No particular preference.

PROPAGATION:- From cuttings

USES:- A beautiful shrub but unfortunately tends to suffer from die-back can flower twice a year. Best when planted as a background and looks particularly effective in corners against brickwalls. Note it is poisonous.

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BUILDINGS BRANCH

DATURA suaveolens

DRG No

STD	548	12	
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Moon flower/Angel trampets

j.ely
Arch/Eng

je
Drawn

Scale

na :

Date

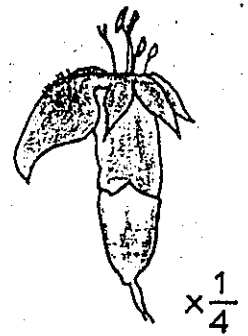
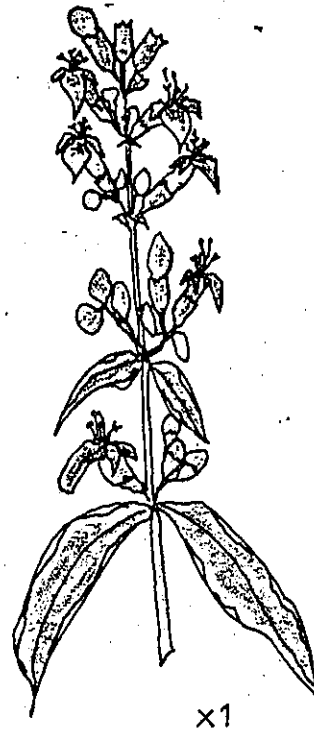
4	3	76
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SHAPE

FLOWER

Small insignificant blue flowers borne in a terminal inflorescence.

1m.

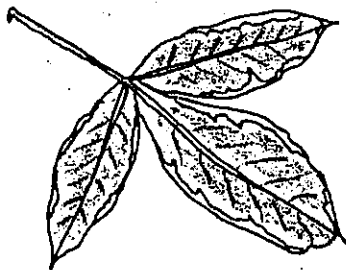


LEAF

Opposite trifoliate whitish underneath green with creamy edging.

FRUIT

Insignificant.



GROWTH:- Fast growing bush.

CLIMATE:-Hardy.

SOIL:- Good loamy soil.

PROPAGATION:-Very easily from cuttings.

USES:- Very easy to grow and very commonly planted either as a background shrub or as a hedge. It can withstand clipping. Effective when planted in association with Acalypha, Euphorbia cotinifolia.

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BUILDINGS BRANCH

VITEX agnus castus

DRG No

STD 548

12

j.ely
Arch/Eng

j.e
Drawn

Scale

Date

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SL 1971

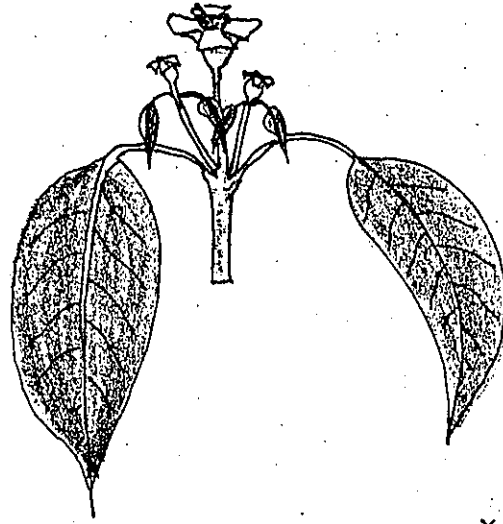
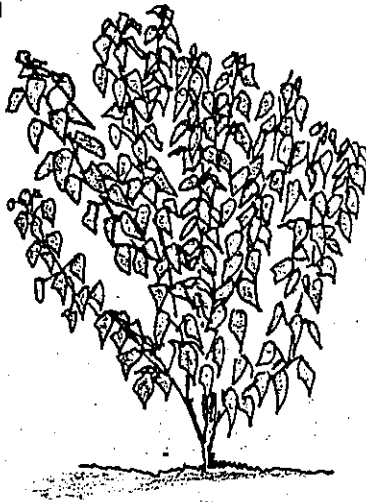
SHEET 28

SHAPE

FLOWER

Insignificant feature. Creamy white in colour.

1.5m



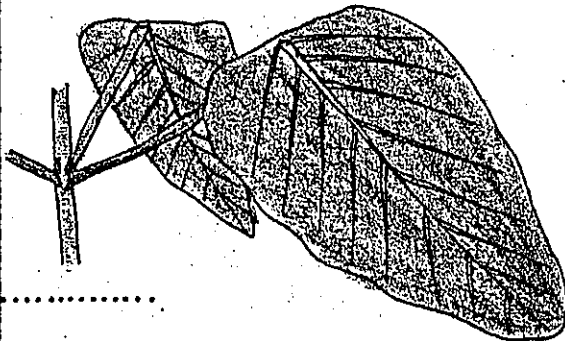
x2.

LEAF

Coppery - purplish leaves.

FRUIT

Insignificant feature.



x1

GROWTH. Fast growing

CLIMATE. Hot climates.

SOIL Good rich loams.

PROPAGATION. Strikes very easily from cuttings.

USES This can grow into quite a large shrub. Its handsome foliage makes it extremely attractive especially in mixed shrub borders.

REPUBLIC OF ZAMBIA WORKS DEPARTMENT BUILDINGS BRANCH
 PO BOX 967 LUSAKA Telephone 51966

EUPHORBIA cotinifolia

DRG No

STD	548	12	
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Copper Bush.

jely	j.e.
Arch/Eng	Drawn

Scale	Date
na :	5 3 76

SHOOT.

Red bracts, with clusters of curiously shaped reduced green and yellow flowers borne terminally, appearing in the dry season.



Individual flower.

GROWTH: Can reach a height of 3 metres. Originally from Mexico. Cut back each year after flowering.

CLIMATE: Prefers a sunny warm location.

SOIL: No particular preference. Needs careful mulching during the dry season.

PROPAGATION: Strikes easily from cuttings.

USES: One of the most well known ornamental shrubs in the Tropics. It is a magnificent plant for giving colour in the dry season. There are now double and creamy yellow bracted forms available. It is excellent as a specimen plant or when block planted in larger landscape schemes. It looks particularly effective when seen against a background of darker foliage or against a plain white wall.

NOTE: The Euphorbias all exude a milky white latex when the stem is snapped, although this is not unique to the Euphorbias. Frangipani, for example, exudes a white latex. It is useful however as a distinguishing sign between the Euphorbias and the Cactii which are often so similar. The diversification and adaptability of the Euphorbias is truly amazing.

REPUBLIC OF ZAMBIA WORKS DEPARTMENT BUILDINGS BRANCH
 PO BOX 967 LUSAKA Telephone 51966

EUPHORBIA pulcherrima	DRG No		STD	548	12	
	j.ely.	j.e.	Scale		Date	
Poinsettia	Arch/Eng	Drawn	na.:		4	3 76

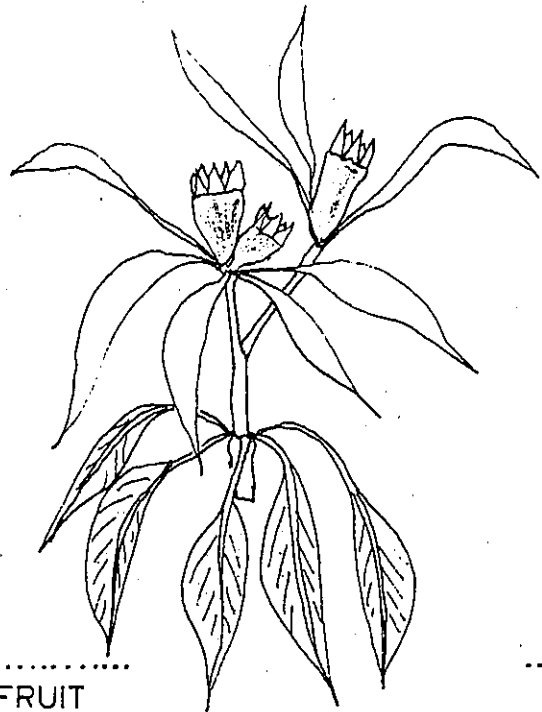
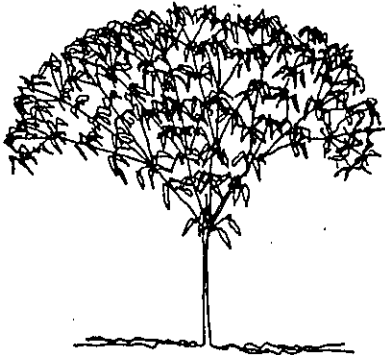
4
1971

SHAPE

FLOWER

A mass of miniature white poinsettia flowers appear in May.

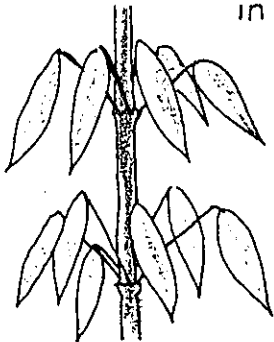
2m.



x 2

LEAF In whorls of 6-8. New shoots in 4's

FRUIT Small, green-brown



1
x 2

x 2

GROWTH. Fairly fragile and not particularly fast growing.

CLIMATE Tender and requires a warm sheltered position.

SOIL Well drained loam.

PROPAGATION. Best from seed it is rather slow from cuttings.

USES When in flower it is a magnificent and should be planted in mixed shrub borders or at the entrance to buildings.

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BUILDINGS BRANCH

EUPHORBIA leucacephala DRG No

STD	548	12	
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Snow bush

j ely
Arch/Eng

je
Drawn

Scale

Date

na :

7	3	76
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A4
KSL 1971

SHEET 31

SHOOT



GROWTH: A spiny succulent growing to 1metre in height.

CLIMATE: Tropical drought resistant.

SOIL: Well drained fertile loam.

PROPAGATION: From cuttings.

USES: The spines on this plant are very vicious and it is an ideal plant to give added security. A bed of this one metre wide beneath walls or chainlink fencing is a very effective deterrent to intruders. Provided it is shaped away from the paving etc, it is good for defining footpaths to control pedestrian movement and protect lawns from edge wear. It should not be planted where there are plenty of young children however!

It is good for block planting, covering embankments as a constituent of rockeries or as a front shrub in a mixed shrub border.

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 PO BOX 967 LUSAKA Telephone 51966 **BUILDINGS BRANCH**

EUPHORBIA splendens

DRG No

STD 548 12

Christ Thorn.

jely

je

Scale

Date

Arch/Eng

Drawn

na :

5 3 76

4
 L 1971

SHEET 20

SHOOTS.



x1.

Hibiscus rosa-sinensis
(Indigenous to China).



x1.

Hibiscus schizopetalus.
(Indigenous to East Africa).

GROWTH. Unpruned will reach a height of 4-5 metres. Flowers can be 15cms in diameter.

CLIMATE: Likes the full sun protected from wind.

SOIL : Well drained rich loams. Mulch and feed regularly.

PROPAGATION: From cuttings.

USES *Hibiscus rosa-sinensis* has many varieties and is a common and well known plant in tropical gardens. The commonest types are red, pink and yellow but all have long stamen tube with yellow stamens and red 5 lobed stigma. Generally the deeper the flower colour the more robust the plant and larger the flower.

Makes an excellent hedge plant. Good as a specimen plant or in a mixed shrub border.

The name 'Shoeflower' is given because the petals are used for polishing shoes.

REPUBLIC OF ZAMBIA WORKS DEPARTMENT
PO BOX 967 LUSAKA Telephone 51966

BUILDINGS BRANCH

HIBISCUS *rosa-sinensis*

DRG No

STD 548 12

Shoe flower.

j ely
Arch/Eng

je
Drawn

Scale

Date

no :

9 3 76.

SHAPE

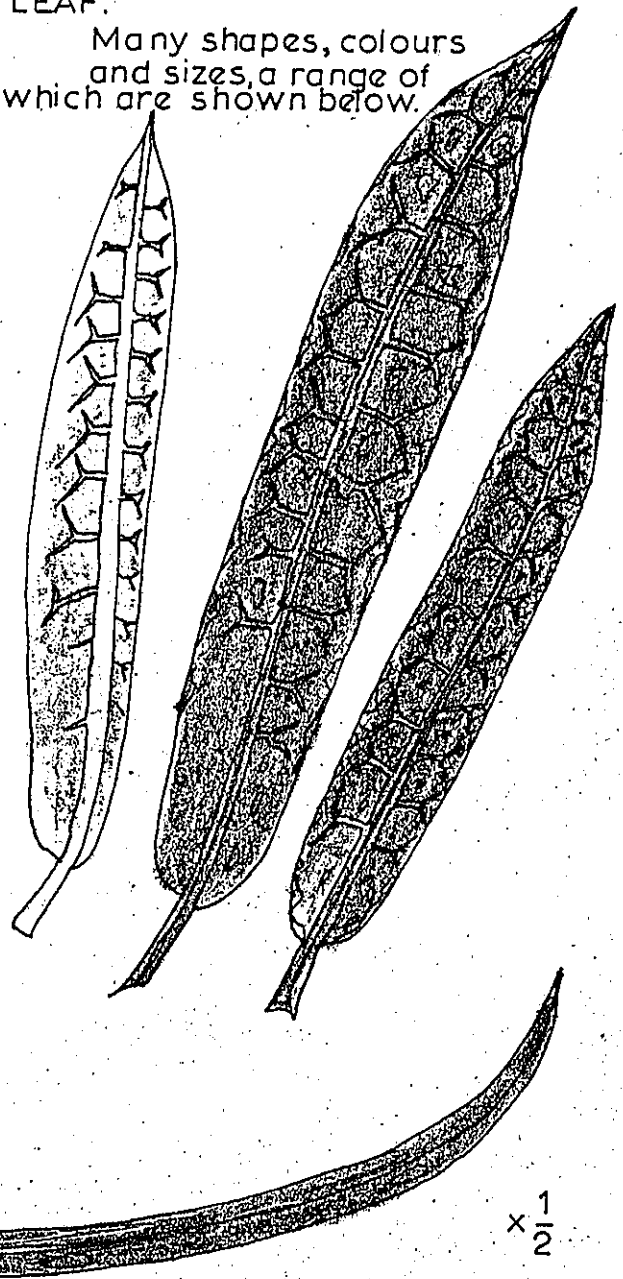
Typical specimen.

1.5m



LEAF.

Many shapes, colours and sizes, a range of which are shown below.



GROWTH: Originates from the Moluccan Islands. The larger leaf types tend to be slower growing, though they can reach 4.5 metres in height.

CLIMATE: Needs full sun but water in dry season to prevent leaf drop.

SOIL: Good rich loam and regular feeding,

PROPAGATION: Easily from cuttings.

USES: So many varieties but in general the CROTONS make good hedge plants, It is good as a specimen plant in key situations or in a mixed shrub border. Also can be used as a display pot plant in entrance foyers etc.

REPUBLIC OF ZAMBIA WORKS DEPARTMENT
PO BOX 967 LUSAKA Telephone 51966

BUILDINGS BRANCH

CODIUM variegatum.

DRG No

STD 548 12

Croton.

jely je
Arch/Eng Drawn

Scale Date

na : 11 3 76

SHAPE

-2m

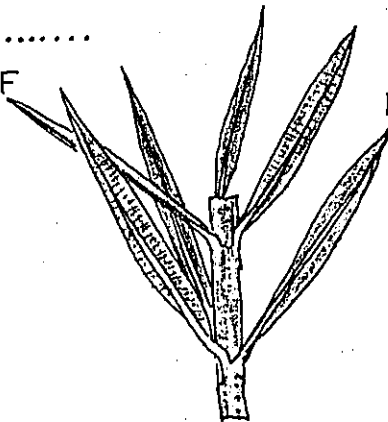


FLOWER: Single or double forms of white, pink, crimson, red or yellow flowers for most of the year.



double form. x1

LEAF

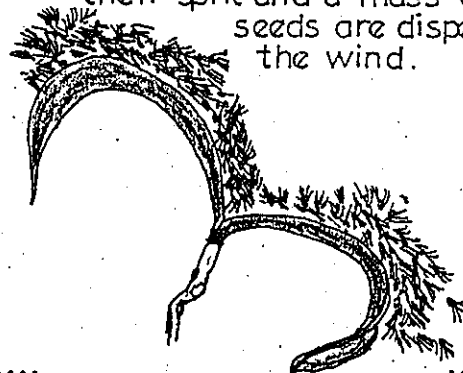


Leathery leaves in whorls of 3.

x $\frac{1}{3}$

FRUIT

Paired fruits become woody then split and a mass of tiny seeds are dispersed by the wind.



x $\frac{1}{2}$

GROWTH: Quick growing shrub from the Mediterranean region that can reach 5 metres tall. Suckers freely and needs hard pruning to keep it to a manageable size. Evergreen.

CLIMATE: Hot sunny location. It is very drought resistant once established.

SOIL: Well drained sandy loam.

PROPAGATION: Strikes very easily from cuttings.

USES: A member of the Apocynaceae family, and all parts of this plant are extremely poisonous so AVOID planting it where there are likely to be concentrations of people, especially children. It is best used as a perimeter screen, as a back component to a mixed shrub border or for block planting in landscape schemes. It will withstand the grime of an industrial or roadside environs.

REPUBLIC OF ZAMBIA WORKS DEPARTMENT PO BOX 967 LUSAKA Telephone 51966 **BUILDINGS BRANCH**

NERIUM oleander

DRG No

STD	548	12	
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Oleander.

j.ely	j.e
Arch/Eng	Drawn

Scale	Date
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SHAPE

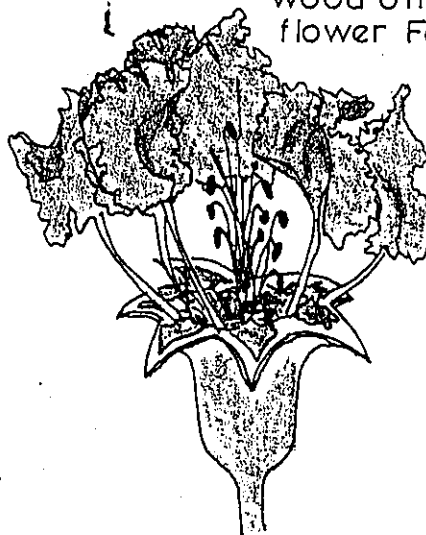
Coppiced form.

2m.



FLOWER

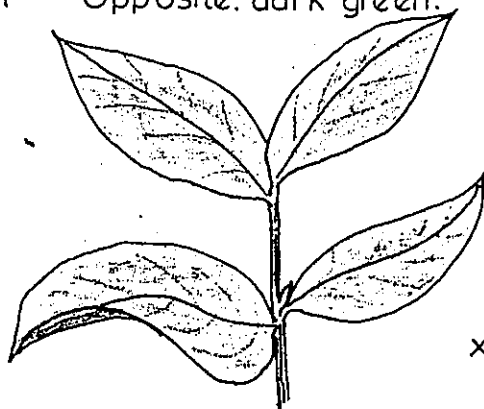
The pink-mauve flowers are borne in terminal clusters on new wood only. In flower Feb-March.



x3

LEAF

Opposite, dark green.



x 1/2

FRUIT

Woody capsular fruit.



x3

GROWTH: Deciduous and fast growing. Best when coppiced back each year as it can reach 7metres in height. Despite its name it is indigenous to China.

CLIMATE: Hardy preferring the full sun.

SOILS: Good free draining soil. Do not overwater in winter.

PROPAGATION: Normally from seed.

USES: A colourful shrub when in flower but rather drab in between except in winter when its leaves turn orange before falling. Best as a specimen shrub.

REPUBLIC OF ZAMBIA WORKS DEPARTMENT
PO BOX 967 LUSAKA Telephone 51966

BUILDINGS BRANCH

LAGEROSTROEMIA indica

STD 548 12

Pride of India.

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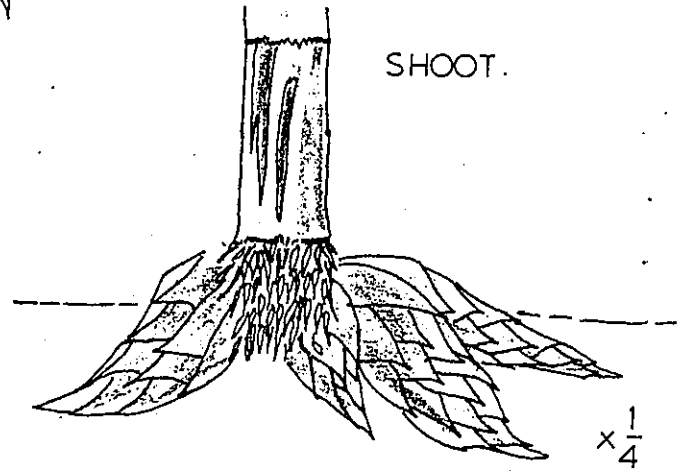
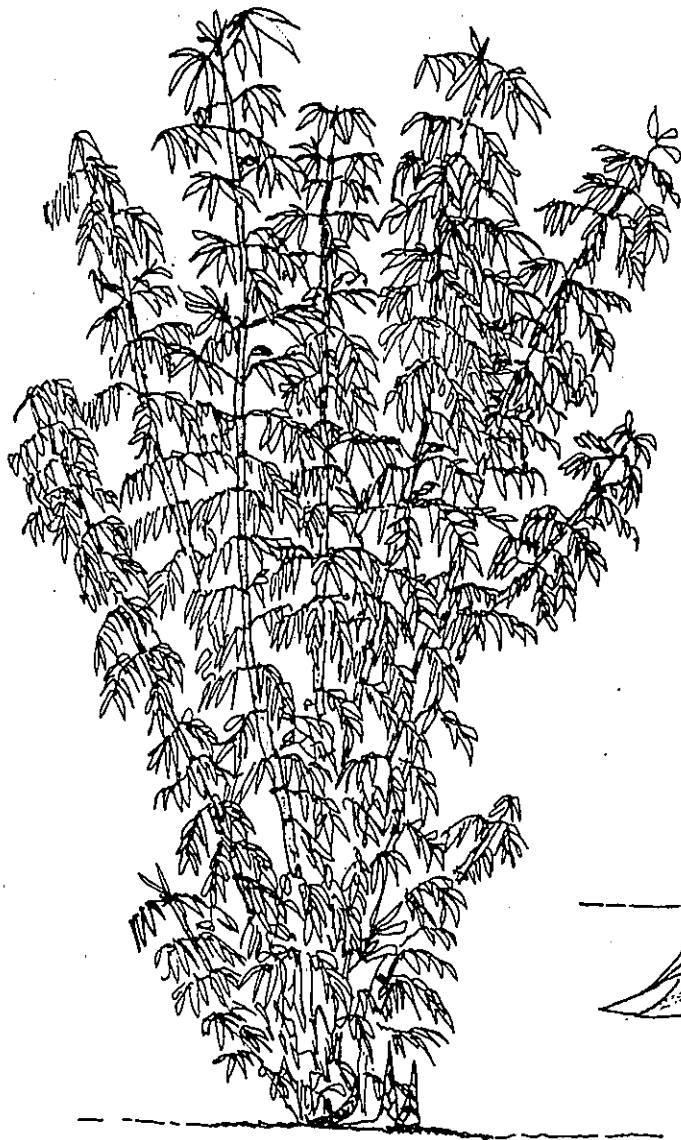
Date

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SHAPE

6m.



GROWTH. Very fast growing and vigorous. Some bamboos can grow 50cms a day. Can reach 20m in height in Zambia.

CLIMATE. Withstands a wide range.

SOIL. No preference

PROPAGATION. Replant a portion of a rhizome with a growing tip.

USES. Probably best used as a screen, especially to hide an unattractive outbuilding or toilets. Good as a boundary screen or as a background foil for smaller plant material.

REPUBLIC OF ZAMBIA WORKS DEPARTMENT
PO BOX 967 LUSAKA Telephone 51966 **BUILDINGS BRANCH**

BAMBUSA spp.

DRG No

STD 548 12

BAMBOO.

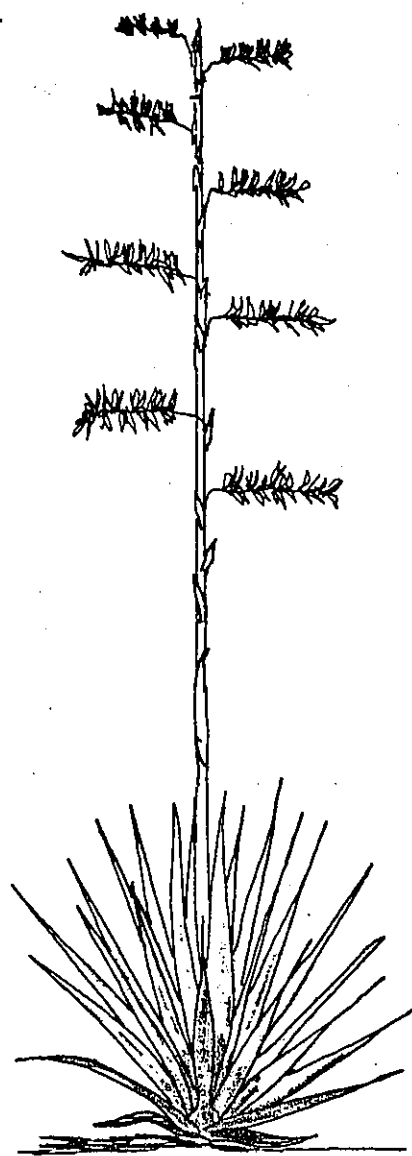
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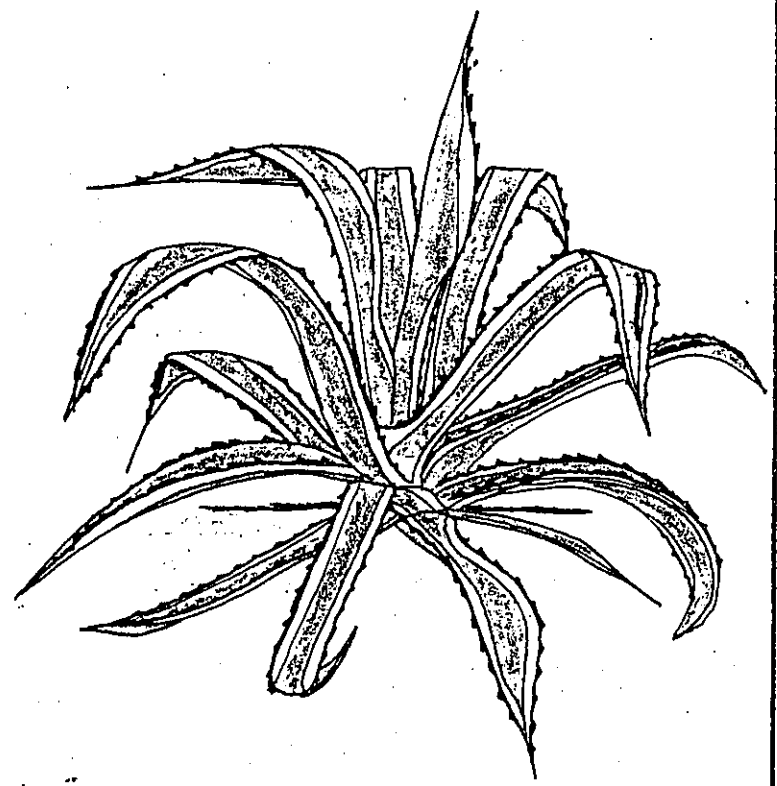
Date
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4m.



◀ Agave sisalana with flowering shoot bearing bulbils.

Agave americana marginata



NOTE:-

GROWTH: These are two of the commonest types of succulents originating from Mexico. Can reach 2m. tall. Flowering shoot produced after a minimum of 10 years but this is an unknown variable. Once produced the mother plant dies.

CLIMATE:- Hot sunny conditions.

SOIL:- Poor soil but plenty of water. Drought resistant.

PROPAGATION:- From suckers at base or from bulbils.

USES:- Excellent as a accent plant or for block planting especially for security reasons. Because of vicious spines do not plant where there are likely to be many children.

REPUBLIC OF ZAMBIA WORKS DEPARTMENT PO BOX 967 LUSAKA Telephone 51966 **BUILDINGS BRANCH**

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Century plant	j.ely Arch/Eng	j.e Drawn
	Scale	Date
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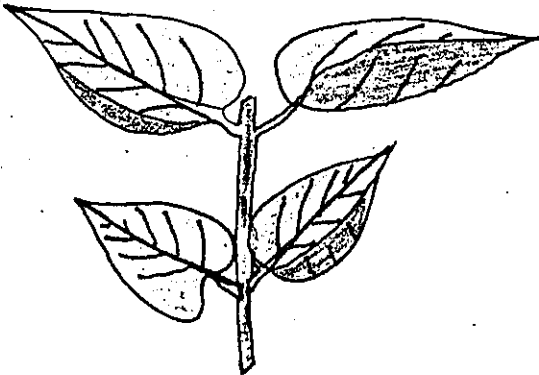
FLOWER

White with delicate fragrance.

1m.



LEAF



FRUIT

Insignificant feature

GROWTH. A rather straggly shrub, so best clipped as an ornamental feature.
Quick growing.

CLIMATE. Tropical full sun.

SOIL. No preference, a good loam.

PROPAGATION. From cuttings.

USES. It will also scramble as a climber. Best used as a foreground plant in a mixed shrub border in front of more robust and larger shrubs

REPUBLIC OF ZAMBIA WORKS DEPARTMENT BUILDINGS BRANCH
PO BOX 967 LUSAKA Telephone 51966

JASMINUM sambac

DRG No

STD 548 12

Arabian jasmine

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SHAPE

FLOWER

—2m



Red bracts and yellow tubular flowers.

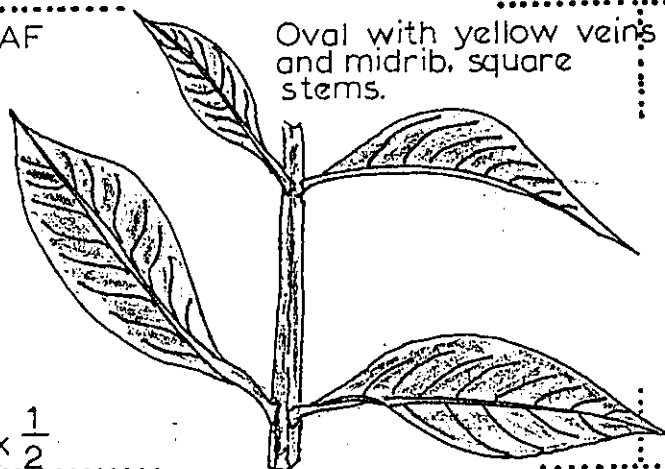
x1

LEAF

Oval with yellow veins and midrib, square stems.

FRUIT

Not illustrated



x 1/2

GROWTH. Originally from South America. A fast growing branching shrub.

CLIMATE. Hot climate.

SOIL. A good fertile soil.

PROPAGATION. Cuttings strike very easily.

USES. A handsome foliage plant suitable for shade positions. Needs pruning when it is 3m. high. Good in a mixed border particularly in shady corners adjacent to buildings.

REPUBLIC OF ZAMBIA WORKS DEPARTMENT
PO BOX 967 LUSAKA Telephone 51966

BUILDINGS BRANCH

SANCHEZIA nobilis

DRG No

STD 548 12

j.ely
Arch/Eng

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Drawn

Scale

Date

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RECOMMENDED LOCATIONS FOR TREE PLANTING.

SHE- ET NO.	SPECIES OF TREE	SUITABLE FOR:-							
		ROADSIDES	PERIMETER	SCREENS	SPECIMEN	CAR PARKS	SHADE	AWKWARD AREAS	BACK- GROUND
01	<i>Spathodea campanulata</i>	●	○	○	○	●	○	○	○
02	<i>Bauhinia variegata</i>	●	○	○	○	○	○	○	○
03	<i>Callistemon citrinus</i>	○	○	○	○	○	○	○	○
04	<i>Cassia spectabilis</i>	○	○	○	○	○	○	○	○
05	<i>Delonix regia</i>	○	○	○	○	○	○	○	○
06	<i>Jacaranda mimosifolia</i>	●	○	○	○	○	○	○	○
07	<i>Solanum macranthum</i>	○	○	○	○	○	○	○	○
08	<i>Bocconea frutescens</i>	○	○	○	○	○	○	○	○
09	<i>Trichilia emetica</i>	●	○	○	○	○	○	○	○
10	<i>Toona ciliata</i>	○	○	○	○	○	○	○	○
11	<i>Gmelina arborea</i>	○	○	○	○	○	○	○	○
12	<i>Ipomoea arborescens</i>	○	○	○	○	○	○	○	○
13	<i>Plumeria rubra</i>	○	○	○	○	○	○	○	○
14	<i>Stenolobium stans</i>	○	○	○	○	○	○	○	○
15	<i>Dracaena draco</i>	○	○	○	○	○	○	○	○
16	<i>Ficus elastica</i>	○	○	○	○	○	○	○	○
17	<i>Grevillea robusta</i>	●	○	○	○	○	○	○	○
18	<i>Kigelia africana</i>	○	○	○	○	○	○	○	○
19	<i>Melia azedarach</i>	○	○	○	○	○	○	○	○
20	<i>Eucalyptus citriodora</i>	○	○	○	○	○	○	○	○

NOTE: Those of same colour are suitable for mixing together as they complement one another in foliage effect or differing flowering periods.

RECOMMENDED LOCATIONS FOR SHRUB PLANTING.

SHEET NO	SPECIES OF SHRUB	SUITABLE FOR:-				SEMI-CLIMBERS
		BLOCK PLANTING	SHRUB BORDERS	SPECIMEN FOLIAGE	ADDITIONAL SECURITY	
21	<i>Thevetia peruviana</i>	●	●	○	○	○
22	<i>Acalypha species</i>	○	○	●	○	○
23	<i>Malva viscosus mollis</i>	○	○	○	○	○
24	<i>Bougainvillea species</i>	○	○	○	○	○
25	<i>Caesalpinia pulcherrima</i>	○	○	○	○	○
26	<i>Bixa orellana</i>	○	○	○	○	○
27	<i>Datura suaveolens</i>	○	○	○	○	○
28	<i>Vitex agnus-castus</i>	●	●	○	○	○
29	<i>Euphorbia cotinifolia</i>	○	●	○	○	○
30	<i>Euphorbia pulcherrima</i>	○	●	○	○	○
31	<i>Euphorbia leucocephala</i>	○	○	○	○	○
32	<i>Euphorbia splendens</i>	○	○	○	○	○
33	<i>Hibiscus rosa-sinensis</i>	○	●	○	○	○
34	<i>Codiaeum variegatum</i>	○	○	○	○	○
35	<i>Nerium oleander</i>	○	●	○	○	○
36	<i>Lagerstroemia indica</i>	○	○	○	○	○
37	<i>Bambusa sp.</i>	○	○	○	○	○
38	<i>Agave sp.</i>	○	○	○	○	○
39	<i>Jasminum sambac</i>	○	○	○	○	○
40	<i>Sanchezia nobilis</i>	○	○	○	○	○

NOTE: Those of same colour are suitable for mixing together as they complement one another in foliage effect or differing flowering periods.