

-

PIPERACEAE

PEPEROMIA

Peperomia alata
Peperomia angustata
Peperomia blanda
Peperomia delascioi
Peperomia emarginella
Peperomia galioides
Peperomia glabella
Peperomia graciana
Peperomia haematolepis
Peperomia hernandiifolia
Peperomia lancifolia
Peperomia macrostachya
Peperomia magnoliifolia
Peperomia maguirei
Peperomia obtusifolia
Peperomia ouabiana
Peperomia pellucida
Peperomia pernambucensis
Peperomia popayanensis
Peperomia purpurinervis
Peperomia quadrangularis
Peperomia quadrifolia
Peperomia reptans
Peperomia rhombea
Peperomia rotundifolia
Peperomia serpens
Peperomia tenella
Peperomia tetraphylla
Peperomia transparens
Peperomia urocarpa

PIPER

Piper adenandrum
Piper aduncum
Piper aequale
Piper alatabaccum
Piper amalago
Piper angustifolium
Piper anonifolium
Piper arboreum
h
Piper aulacospermum
Piper avellanum
Piper bartlingianum
Piper bolivarianum
Piper brasiliense
Piper brownsbergense
Piper cernuum
Piper ciliomarginatum
Piper consanguineum
Piper coruscans

Piper crassinervium
Piper cyrtopodium
Piper demeraranum
Piper dilatatum
Piper divaricatum
Piper duckei
Piper dumosum
Piper eucalyptifolium
Piper fanshawei
Piper flexuosum
Piper fuligineum
Piper glabrescens
Piper guianense
Piper hirtilimbium
Piper hispidum
Piper hostmannianum
Piper humistratum
Piper hymenophyllum
Piper inaequale
Piper insipiens
Piper marginatum
Piper nigrispicum
Piper nigrum
Piper obliquum
Piper paramaribense
Piper peltatum
Piper perstipulare
Piper phytolaccifolium
Piper piscatorum
Piper poiteanum
Piper pulleanum
Piper remotinervium
Piper reticulatum
Piper rudgeanum
Piper rupununianum
Piper salicifolium
Piper trichoneuron
Piper tuberculatum
Piper wachenheimii

/fruits

Fruits small drupes or nuts.

Fruits minute nuts or drupes ("berries"), (sub)basely or laterally attached, sessile or somewhat stipitate when mature, occasionally

Fruits laterally attached, globose-ovoid, reddish brown,

Fruits basely attached, ovoid to globose, beaked, blackish, often verruculose,

Fruits subbasely attached, globose to ovoid, more or less verruculose, brown,

Fruits stipitate pale brown, smooth, oblong-ellipsoid, |, crowned with a persistent, conic style,

Fruits basely attached (according to Steyermark, on a short stipe), ellipsoid,

Fruits subbasely attached, globose, brown,

Fruits laterally attached, globose, reddish brown,

Young fruits flat at apex, green, mature fruits not yet collected.

Fruits ellipsoid or ovoid narrowing into slender beak, with curved tip,

Fruits basely attached, ellipsoid, reddish brown,

Fruits basely attached, narrowly cylindrical, brown,

Fruits basely attached, cylindrical, verruculose, brown,

Fruits basely attached, subglobose, verruculose, reddish brown or blackish, gradually tapering into beak, which is slightly

Fruits not sunken, subbasely attached, globose, green,

Fruits basely attached, ellipsoid, verruculose, reddish brown or blackish,

Fruits sessile, ovoid, brown, somewhat verruculose,

Fruits somewhat stipitate, globose, brown (young, green ones may be finely longitudinally ridged),

Fruits basely attached, cylindrical, slightly verrucose,

Fruits basely attached, ellipsoid,

Fruits basely attached, ovoid to globose, smooth,

Fruits somewhat sunken when young, slightly stipitate when ripe, ovoid, smooth and shiny (in vivo) brown, upper half often

Fruits basely attached, ovoid or subglobose, brown,

Fruits basely attached, subglobose to ovoid, with more or less hooked beak and subapical stigma.

Fruits ellipsoid or ovoid, |, slightly stipitate at maturity,

Fruits (sub)basely attached, globose to ovoid, brown, reticulately verruculose,

Fruits basely attached, ellipsoid, brown,

Fruits slightly stipitate at maturity, ellipsoid to obpyriform, with short beak and apical stigma.

Fruits basely attached in depressions of rachis, narrowly ovoid to ellipsoid-subcylindrical,

Fruits basely attached, globose to ovoid, brown, verruculose,

Fruits brown, ellipsoid with distinct beak,

Fruits drupes, embedded in rachis to exserted, separate from each other or in compact rows, glabrous or with indument, green

Fruits separate at maturity, depressed globose, |, verruculose;

fruits obovoid, trigonous or somewhat tetragonous, |, glabrous or glabrescent, glandular,

fruits oblongoid to trigonous, |, brownish green, glabrous,

Fruits separate, obovoid with 4 prominent, deltoid or lobed projections at top, glabrous or papillose,

Fruits ovoid, conical to apex, |, glabrous or papillose,

fruits depressed globose or obovoid, |, glabrous,

fruits depressed globose, glabrous,

Fruits dark green, laterally compressed, oblongoid or obovoid, |, glabrous or slightly papillose,

Fruits oblongoid, glabrous, may be somewhat papillose, |, becoming stylose or mammiform at apex,

Fruits 4-sulcate, globose, |, truncate at apex, glabrous,

Fruits trigonous or depressed globose, |, glabrous and papillose,

Fruits ovoid to tetragonous, separate, somewhat ridged or winged (at least when dried), glabrous may be somewhat papillose

fruits trigonous, |, glabrous, green,

fruits globose, depressed at apex, densely crisp-pubescent,

fruits depressed-globose to obovoid, glabrous or papillate at apex, substylose,

Fruits obovoid, |, puberulent at apex,

fruits trigonous, |, glabrous,

fruits depressed globose, |, papillose, green, becoming exserted,

fruits obovoid or somewhat angular, depressed at apex, |, glabrous, green,

Sheet1

Fruits rounded, glabrous, with persistent style,

Fruits ovoid, |, glandular, glabrous,

fruits globose, |, puberulent at apex,

Fruits trigonous, glabrous, or with some hairs at top,

fruits obovoid, |, glabrous, becoming exserted,

Fruits obpyramidate-trigonous,

Fruits obovoid to trigonous, glabrous, depressed at apex when dried,

Fruits depressed globose, glabrous,

Fruits obovoid, puberulent at depressed apex,

Fruits depressed globose or ovoid, glabrous,

fruits globose to trigonous, |, glabrous,

fruits depressed globose or subtetragonous, |, glabrous, glandular,

Fruits without style,

-

fruits oblongoid to rounded-trigonous, hirsute,

fruits oblongoid or trigonous, glabrous to puberulent at apex,

fruits oblongoid, sunken, glabrous,

Fruits obovoid to depressed globose, glabrous,

fruits obovoid or slightly flattened, |, somewhat separate, glabrous or minutely papillate,

fruits trigonous, glabrous, yellowish to green,

Fruits oblongoid, glabrous,

fruits trigonous or subtetragonous with narrow "collar", glabrous, green,

Fruits globose, |, glabrous, red or black,

Fruits obovoid or oblongoid, sometimes flattened at apex, |, minutely pubescent or glabrous or with a few basal hairs,

fruits globose or obovoid, |, glabrous, green,

Fruits trigonous, glabrous.

fruits trigonous or ovoid, glabrous, verruculose,

fruits globose, |, glabrous, with persistent style,

fruits separate at maturity, not sulcate, globose, |, papillose at apex, glabrescent,

fruits depressed globose to trigonous, |, glabrous,

fruits obovoid to trigonous, papillose or hispidulous,

Fruits trigonous, somewhat exserted when mature, hirsute,

Fruits greenish white, obovoid or oblongoid, |, puberulous, with glabrous disc at apex, separate at maturity,

fruits ovoid, |, glabrous, with persistent short style,

Fruits trigonous to obpyramidal, glabrous, glandular, green,

-

Fruits oblongoid, glandular, hirsute,

Fruits laterally compressed, rounded, glabrous,

Fruits depressed globose or obovoid, |, pubescent or hirtellous, separate from each other,

[illegible]

Sheet1

[illegible]

Sheet1

/fruits/shape	/fruits/texture	/fruits/texture	/fruits/texture
-	0	0	-
cylindric, globose	586	1	smooth
globose, ovoid	0	0	-
ovoid to globose	0	0	-
globose to ovoid	0	0	-
conic, ob, oblong	586	1	smooth
-	0	0	-
globose	0	0	-
globose	0	0	-
flat	0	0	-
ovoid	0	0	-
-	0	0	-
cylindric	0	0	-
cylindric	0	0	-
subglobose	0	0	-
globose	0	0	-
-	0	0	-
ovoid	0	0	-
globose	0	0	-
cylindric	0	0	-
-	0	0	-
ovoid to globose	586	1	smooth
ovoid	586	1	smooth
ovoid or subglobose	0	0	-
subglobose to ovoid	0	0	-
ovoid	0	0	-
globose to ovoid	0	0	-
-	0	0	-
ob, pyriform	0	0	-
subcylindric, ovoid	0	0	-
globose to ovoid	0	0	-
-	0	0	-
globose	0	0	-
globose	0	0	-
ob, ovoid	0	0	-
oblongoid	0	0	-
deltoid, ob, ovoid	0	0	-
conical, ovoid	0	0	-
globose or ob, ovoid	0	0	-
globose	0	0	-
oblongoid or ob, ovoid	0	0	-
oblongoid	0	0	-
globose, truncate	0	0	-
globose	0	0	-
ovoid	0	0	-
-	0	0	-
globose	0	0	-
globose to ob, ovoid	0	0	-
ob, ovoid	0	0	-
-	0	0	-
globose	0	0	-
angular, ob, ovoid	0	0	-

Sheet1

rounded	0	0-
ovoid	0	0-
globose	0	0-
-	0	0-
ob,ovoid	0	0-
ob	0	0-
ob,ovoid	0	0-
globose	0	0-
ob,ovoid	0	0-
globose or ovoid	0	0-
globose	0	0-
globose	0	0-
-	0	0-
-	0	0-
oblongoid to rounded	0	0-
oblongoid	0	0-
oblongoid	0	0-
globose,ovoid	0	0-
flattened,ob,ovoid	0	0-
-	0	0-
oblongoid	0	0-
-	0	0-
globose	0	0-
flattened,ob,oblongoid,ovoid,ovoid or ob,ovoid or oblongoid	0	0-
globose or ob,ovoid	0	0-
-	0	0-
ovoid	0	0-
globose	0	0-
globose	0	0-
globose	0	0-
ob,ovoid	0	0-
-	0	0-
ovoid or oblongoid	0	0-
ovoid	0	0-
ob	0	0-
-	0	0-
oblongoid	0	0-
rounded	0	0-
globose or ob,ovoid	0	0-

Sheet1

/fruits/position	/fruits/position	/fruits/position	/fruits/hairs	/fruits/hairs	/fruits/hairs
0	0 -	0	0	0 -	
23	1 lateral	0	0	0 -	
23	1 lateral	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
23	1 lateral	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	0	0	0 -	
0	0 -	71	100000 glabrous		
0	0 -	0	0 -		
0	0 -	71	100000 glabrous		
0	0 -	71	100000 glabrous		
0	0 -	71	100000 glabrous		
0	0 -	71	100000 glabrous		
0	0 -	71	100000 glabrous		
0	0 -	71	100000 glabrous		
23	1 lateral	71	100000 glabrous		
0	0 -	71	100000 glabrous		
0	0 -	71	100000 glabrous		
0	0 -	71	100000 glabrous		
0	0 -	71	100000 glabrous		
0	0 -	71	100000 glabrous		
0	0 -	71	100000 glabrous		
0	0 -	386	10 pubescent		
0	0 -	71	100000 glabrous		
0	0 -	351	1000 puberulent		
0	0 -	71	100000 glabrous		
0	0 -	0	0 -		
0	0 -	71	100000 glabrous		

Sheet1

0	0-	71	100000 glabrous
0	0-	71	100000 glabrous
0	0-	351	1000 puberulent
0	0-	71	10100000 glabrous,hairs
0	0-	71	100000 glabrous
0	0-	0	0 -
0	0-	71	100000 glabrous
0	0-	71	100000 glabrous
0	0-	351	1000 puberulent
0	0-	71	100000 glabrous
0	0-	71	100000 glabrous
0	0-	71	100000 glabrous
0	0-	0	0 -
0	0-	0	0 -
0	0-	141	10000 hirsute
0	0-	90	1000000000 glabrous to puberulent
0	0-	71	100000 glabrous
0	0-	71	100000 glabrous
0	0-	71	100000 glabrous
0	0-	71	100000 glabrous
0	0-	71	100000 glabrous
0	0-	71	100000 glabrous
0	0-	71	100000 glabrous
0	0-	106	10000010 hairs,pubescent
0	0-	71	100000 glabrous
0	0-	71	100000 glabrous
0	0-	71	100000 glabrous
0	0-	71	100000 glabrous
0	0-	71	1000000 glabrescent
0	0-	71	100000 glabrous
0	0-	211	1000000000 hispidulous
0	0-	141	10000 hirsute
0	0-	71	100100 glabrous,puerulous
0	0-	71	100000 glabrous
0	0-	71	100000 glabrous
0	0-	0	0 -
0	0-	141	10000 hirsute
23	1 lateral	71	100000 glabrous
0	0-	398	1 pubescent or hirtellous

/fruits/colour	/fruits/colour	/fruits/colour
0	0 -	
0	0 -	
285	1010000000	brown,reddish
143	1000	blackish
285	1000000000	brown
285	1000000000	brown
0	0 -	
285	1000000000	brown
285	1010000000	brown,reddish
782	10000	green
0	0 -	
285	1010000000	brown,reddish
285	1000000000	brown
285	1000000000	brown
291	10000001	brown or blackish,reddish
782	10000	green
291	10000001	brown or blackish,reddish
285	1000000000	brown
285	1000010000	brown,green
0	0 -	
0	0 -	
0	0 -	
285	1000000000	brown
285	1000000000	brown
0	0 -	
0	0 -	
285	1000000000	brown
285	1000000000	brown
0	0 -	
0	0 -	
285	1000000000	brown
285	1000000000	brown
0	0 -	
0	0 -	
0	0 -	
285	10100	brownish,green
0	0 -	
0	0 -	
0	0 -	
0	0 -	
782	10000	green
0	0 -	
0	0 -	
0	0 -	
0	0 -	
782	10000	green
0	0 -	
0	0 -	
0	0 -	
0	0 -	
782	10000	green
782	10000	green

0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
2509	100000000 yellowish to green
0	0 -
782	10000 green
1711	1000000 red or black
0	0 -
782	10000 green
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
782	100010 greenish,white
0	0 -
782	10000 green
0	0 -
0	0 -
0	0 -
0	0 -

Sheet1

[illegible]

-
-
-
-
-
apex depressed, glandular, pubescent,

[illegible]

Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

/fruits/apex/hairs	/fruits/dimensions (merged)	/fruits/dimensions (merged)/length
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	1-1.1 x 0.5 mm	1-1.1
-	ca. 1 mm long with apical stigma	1
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	0.9-1 mm long	0.9-1
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	2.5-3 mm in diam.	-
-	0.7-0.8 mm in diam.	-
-	0.7-1 mm in diam.	-
-	-	-
-	ca. 1 mm in diam. , 1.5-2 mm long	1.5-2
-	ca. 2.5 mm wide (when dried)	-
-	-	-
-	0.8-1 mm in diam. , 2 mm long	2
-	2 mm in diam. , to 4 mm long	4
-	3-4.5 mm in diam.	-
-	to 2 mm in diam.	-
-	-	-
-	to 1 mm wide	-
-	-	-
-	-	-
-	to 8 mm long , ca. 2-2.5 mm wide	8
-	0.4 mm wide	-
-	to 3 mm in diam.	-
-	0.8-1 mm wide	-

Sheet1

-	-	-	
-	ca. 2 mm wide	-	
-	2-2.5 mm wide	-	
-	-	-	
-	1-2 mm thick	-	
pubescent	-	-	
-	-	-	
-	-	-	
-	-	-	
-	0.8-1 mm wide	-	
-	1.2 mm in diam.	-	
-	-	-	
-	-	-	
-	-	-	
-	0.5-1 mm long	0.5-1	
-	ca. 2 mm wide	-	
-	-	-	
-	-	-	
-	-	-	
-	5-6 mm long	5-6	
-	1-2 mm in diam.	-	
-	3 mm in diam.	-	
-	-	-	
-	-	-	
-	1-1.5 mm in diam.	-	
-	1.5 mm in diam.	-	
-	1 mm thick	-	
-	ca. 2 mm wide	-	
-	-	-	
-	1.5 x 1.2-1.5 mm		1.5
-	2 mm in diam.	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	ca. 1 mm thick	-	

Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

-	-	
-		2
-	2-2.5	
-	-	
-	1-2	
-	-	
-	-	
-	-	
-	-	
-	0.8-1	
-		1.2
-	-	
-	-	
-	-	
-	-	
-	1-	
-		2
-	-	
-	-	
-	6-	
-	1-2	
-		3
-	-	
-	1-1.5	
-		1.5
-		1
-		2
-	-	
-	1.2-1.5	
-		2
-	-	
-	-	
-	-	
-	-	
-		1

Sheet1

[illegible]

Sheet1

-	-	
	2-	
-		2
-	-	
-		1
-	-	
-	-	
-	-	
-	-	
-		0.8
	1.2-	
-	-	
-	-	
-	-	
-	-	
-	-	
	2-	
-	-	
-	-	
-	-	
-		1
	3-	
-	-	
-	-	
-		1
	1.5-	
	1-	
	2-	
-	-	
-		1.2
	2-	
-	-	
-	-	
-	-	
-	-	
	1-	

Sheet1

[illegible]

Sheet1

-		0
-		0
	2.5	0
-		0
	2	664
-		0
-		0
-		0
-		0
-		0
	1	0
-		0
-		0
-		0
-		0
-		0
-		0
-		0
-		0
-		0
-		0
-		0
	2	0
-		0
-		0
-		0
	1.5	0
-		0
-		664
-		0
-		0
	1.5	0
-		0
-		0
-		0
-		0
-		0
-		664

Sheet1

/fruit/dimensions (merged)/texture /fruit/dimensions (merged)/texture

[illegible]

Sheet1

[illegible]

Sheet1

/fruits/stigma	/fruits/stigma	
-	-	
stigma apical, central or at base of beak.	-	
-	-	
stigma apical.	-	
-	-	
stigma apical, mammiform.	-	
-	-	
-	-	
-	-	
stigma at base of beak.	-	
-	-	
-	-	
stigma at base of beak.	-	
-	-	
stigma at base of beak.	-	
-	-	
stigma apical, a short style may be developed.	-	
-	-	
-	-	
stigma apical.	-	
-	-	
stigma apical.	-	
-	-	
stigma apical.	-	
-	-	
-	-	
-	-	
-	-	
stigma at base of beak.	-	
stigmas persistent.	-	
stigmas 3, sessile or fruits somewhat stylose.		3
stigmas 3, sessile.		3
stigmas 3, sessile.		3
stigmas 4, sessile.		4
stigmas 3-4, sessile.	-	
stigmas 3, sessile.		3
stigmas 3, sessile.		3
stigmas 3-4, sessile.	-	
stigmas obsolete.	-	
stigmas 4, globose, sessile;		4
stigmas 3, sessile.		3
stigmas 4, sessile.		4
stigmas 3, sessile.		3
stigmas 3, recurved, on long, pilose style.		3
stigmas 3.		3
stigmas 3, sessile,		3
stigmas 3, sessile.		3
stigmas 3, recurved on a very short style.		3
stigmas 3, sessile.		3

Sheet1

stigmas 3, recurved.		3
stigmas 3, may be on a short style or fruits apiculate.		3
stigmas 3, sessile.		3
stigmas 3, sessile.		3
stigmas 3, sessile.		3
stigmas 3, linear, sessile.		3
stigmas 3, erect.		3
stigmas 3, sessile.		3
stigmas sessile.	-	
stigmas sessile.	-	
stigmas 3, sessile.		3
stigmas 3, sessile.		3
stigmas 3?, sessile.		3
-	-	
stigmas 3, sessile.		3
stigmas 3, sessile.		3
stigmas 4, sessile.		4
stigmas 3 or 2, recurved,		3
stigmas 3-4, lanceolate, sessile.	-	
stigmas 3, short, sessile.		3
stigmas 3, sessile.		3
stigmas 3, sessile.		3
stigmas 2-3, sessile.	-	
stigmas 3, often quite long, sessile, sometimes on a short style.		3
stigmas 3, linear, erect, may give impression of a style, obsolete on fruit.		3
-	-	
stigmas 3, recurved, sessile.		3
stigmas 3, on long style.		3
stigmas 4, sessile.		4
stigmas 3, sessile.		3
stigmas 3.		3
stigmas sessile.	-	
stigmas 3, sessile.		3
stigmas 3-4 recurved on short, persistent style.	-	
stigmas 3, minute, sessile.		3
-	-	
stigmas 3, obtuse, sessile.		3
stigmas 3-4, sessile.	-	
stigmas 3, sessile.		3

Sheet1

[illegible]

Sheet1

-	-		0	0
-	-		616	100
-	-		0	0
-	-		0	0
-	-		0	0
-	-		4552	10000
-	-		0	0
-	-		0	0
-	-		0	0
-	-		0	0
-	-		0	0
-	-		0	0
-	-		0	0
-	-		0	0
-	-		0	0
-	-		0	0
-	-		0	0
-	3	4	0	0
-	-		0	0
-	-		0	0
-	-		0	0
-	2	3	0	0
-	-		0	0
-	-		4306	11000
-	-		0	0
-	-		0	0
-	-		0	0
-	-		0	0
-	-		0	0
-	-		0	0
-	-		0	0
-	3	4	0	0
-	-		0	0
-	-		0	0
-	-		4921	1
-	3	4	0	0
-	-		0	0

Sheet1

[illegible]

Sheet1

-	0	0-
apiculate	0	0-
-	0	0-
-	0	0-
-	0	0-
linear	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
ob,linear	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
-	0	0-
obtuse	0	0-
-	0	0-
-	0	0-

Sheet1

[illegible]

Sheet1

127	10 recurved
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
43	1 erect
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
127	10 recurved
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
43	1 erect
0	0 -
127	10 recurved
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
127	10 recurved
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -

/habit

Herbs, shrubs or treelets, sometimes scandent, rarely lianas.

Small epiphytic, epilithic, or terrestrial, succulent herbs, creeping, prostrate, hanging, ascending or erect.

Epiphytic, epilithic or terrestrial, glabrous herb.

Terrestrial, epiphytic or epilithic herb, erect, creeping or ascending, rooting at nodes.

Terrestrial, epiphytic or epilithic herb, erect or ascending from rooting base.

Terrestrial herb, non-creeping, suberect or ascending |, not rooting at nodes.

Epiphytic or epilithic, or epiphyllous herb, creeping and rooting at nodes, glabrous or sparsely villous.

Terrestrial, epilithic or epiphytic, caespitose herb.

Epiphytic, stoloniferous herb, strongly glandular dotted, erect, hanging, prostrate or ascending.

Epiphytic, terrestrial or epilithic herb, creeping and rooting at nodes.

Epiphytic, glabrous herb.

Epiphytic, terrestrial or epilithic herb, creeping.

Terrestrial, epilithic or epiphytic herb, erect or ascending and rooting at decumbent base.

Epiphytic herb, often growing on ants' nests, creeping or hanging and rooting at nodes.

Epiphytic, epilithic or terrestrial herb.

Epiphytic or epilithic herb, erect or ascending from prostrate, rooting base.

Epiphytic, epilithic or terrestrial herb.

Epiphytic or epilithic herb, creeping and rooting at nodes.

Terrestrial herb, delicate, erect, glabrous, annual.

Terrestrial or epiphytic, erect herb, glabrous except for pubescent peduncle.

Terrestrial, ascending, almost glabrous herb, rooting at nodes.

Epiphytic, terrestrial or epilithic herb, creeping to ascending.

Epiphytic or epilithic herb, creeping or hanging, sometimes mat-forming.

Epiphytic, trailing, glabrous herb.

Epiphytic, terrestrial or epilithic herb, creeping.

Epiphytic, stoloniferous herb.

Epiphytic or epilithic herb, prostrate with ascending stem tips rooting at nodes.

Epiphytic or epilithic herb, creeping or twining and rooting at nodes.

Terrestrial, epilithic or epiphytic, not branched, tiny herb, decumbent and rooting at base,

Epiphytic or rarely epilithic herb, caespitose or rooting at nodes and ascending.

Epilithic, erect or ascending, glabrous herb, |, rhizome sometimes tuberous.

Epiphytic or epilithic herb.

Herbs, subshrubs, shrubs or treelets, sometimes with scrambling branches, rarely climbers or lianas.

Shrub or treelet, |, pubescent or villous, hairs

Shrub or treelet,

Shrub or treelet, |, glabrous.

Shrub or treelet, |, glabrous.

Shrub,

Shrub or subshrub

Shrub, occasionally a tree, |, nodose, glabrous.

Shrub or treelet, |, sometimes with long, arching branches, often strongly branching.

Shrub or treelet, |, glabrous, except for ciliate leaf margin.

Small shrub, |, sparingly branched.

Shrub or subshrub |, densely short crisp-pubescent, hairs

Shrub, subshrub or treelet, |, somewhat nodose, glabrous.

Subshrub

Small shrub,

Small shrub or subshrub,

Shrub or treelet,

Shrub

Herbaceous small shrub, |, sometimes creeping, retrorsely crisp-pubescent.

Shrub or subshrub

Shrub or treelet,
Subshrub or herb,
Subshrub or shrub,
Shrub or subshrub
Shrub, subshrub or treelet, sometimes scandent,
Shrub
Shrub or treelet
Shrub or treelet |, glabrous except for subnodal lines of hairs on stem.
Small shrub
Shrub to 2? m tall.
Stout herb or slender shrub,
Shrub
Small shrub, often scrambling, rooting at lower nodes.
Shrub
Shrub or subshrub, occasionally with scrambling branches,
Shrub, subshrub or treelet
Creeping herb or subshrub to
Scandent or creeping shrub, climbing branches rooting at nodes.
Shrub or treelet |, almost glabrous.
Shrub, subshrub or treelet, may be somewhat scandent,
Subshrub or treelet,
Shrub
Shrub sometimes with scrambling branches or liana.
Shrub or treelet,
Small shrub, sometimes trailing,
Large herb
Shrub
Shrub |, glabrous.
Subshrub,
Vine or climbing shrub
Shrub or treelet,
Shrub or treelet,
Treelet or shrub, sometimes scandent, |, tall.
Shrub.
Shrub or tree,
Shrub.
Shrub, sometimes treelet,
Shrub or treelet |, stem minutely hirtellous, usually somewhat tuberculate.
Small shrub or even small treelet, |, nodose in lower part.

Sheet1

/habit	/habit/minimum	/habit/maximum	/habit/texture	/habit/texture	/habit/texture	/habit/hairs
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		71
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		71
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		71
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		71
-	-	-	0	0-		71
-	-	-	0	0-		71
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		71
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		71
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		106
-	-	-	0	0-		0
-	-	-	0	0-		71
-	-	-	0	0-		71
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		71
-	-	-	0	0-		0
-	-	-	0	0-		1
-	-	-	0	0-		0
-	-	-	0	0-		106
-	-	-	0	0-		71
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		0
-	-	-	0	0-		386
-	-	-	0	0-		0

Sheet1

[illegible]

Sheet1

/habit/hairs	/habit/hairs	/habit/growth form	/habit/growth form
0 -		169	100
0 -		22	11
1000 glabrous		0	0
0 -		22	11
0 -		43	1
0 -		22	11
101000 glabrous,villous		22	10
0 -		0	0
0 -		43	1
0 -		22	10
1000 glabrous		0	0
0 -		22	10
0 -		43	1
0 -		22	10
0 -		0	0
0 -		43	1
0 -		0	0
0 -		22	10
1000 glabrous		43	1
1001 glabrous,pubescent		43	1
1000 glabrous		0	0
0 -		22	10
0 -		22	10
1000 glabrous		0	0
0 -		22	10
0 -		0	0
0 -		0	0
0 -		22	10
0 -		0	0
0 -		0	0
1000 glabrous		43	1
0 -		0	0
0 -		0	0
1010001 hairs,pubescent,pubescent or villous		0	0
0 -		0	0
1000 glabrous		0	0
1000 glabrous		0	0
0 -		0	0
0 -		0	0
1000 glabrous		0	0
0 -		0	0
1100 ciliate,glabrous		0	0
0 -		0	0
10001 hairs,pubescent		0	0
1000 glabrous		0	0
0 -		0	0
0 -		0	0
0 -		0	0
0 -		0	0
0 -		0	0
1 pubescent		22	10
0 -		0	0

Sheet1

0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	169	100
0 -	0	0
0 -	0	0
11000 glabrous,hairs	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	22	10
1000 glabrous	0	0
0 -	169	100
0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0
1000 glabrous	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	169	100
0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0
10 hirtellous	0	0
0 -	0	0

Sheet1

/habit/growth form	/habit/height	/habit/height	/habit/height/minimum	/habit/height/maximum
scandent	-	-	-	-
creeping,erect	-	-	-	-
-	-	-	-	-
creeping,erect	-	-	-	-
erect	-	-	-	-
creeping,erect	up to 9 cm	-	-	9
creeping	-	-	-	-
-	-	-	-	-
erect	-	-	-	-
creeping	-	-	-	-
-	-	-	-	-
creeping	-	-	-	-
erect	-	-	-	-
creeping	-	-	-	-
-	-	-	-	-
erect	-	-	-	-
-	-	-	-	-
creeping	-	-	-	-
erect	-	-	-	-
erect	-	-	-	-
-	-	-	-	-
creeping	-	-	-	-
creeping	-	-	-	-
-	-	-	-	-
creeping	-	-	-	-
-	-	-	-	-
-	-	-	-	-
creeping	-	-	-	-
-	-	-	-	-
-	-	-	-	-
erect	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	1.5 m tall	1.5 -	-	-
-	3-7 m tall	-	3	7
-	1-4 m tall	-	1	4
-	2-3 m tall	-	2	3
-	2-4 m tall	-	2	4
-	to 1.5 m tall	-	-	1.5
-	0.5-3 m tall	-	0.5	3
-	2-7 m tall	-	2	7
-	to 2-4 m tall	-	2 2-4	-
-	1-2.5 m tall	-	1	2.5
-	to 2 m tall	-	-	2
-	1-4 m tall	-	1	4
-	to 0.1-1.5 m tall	-	0.1 0.1-1.5	-
-	to 1 m tall	-	-	1
-	0.15-1.5 m tall	-	0.15	1.5
-	2-6 m tall	-	2	6
-	to 1-3 m tall	-	1 1-3	-
creeping	0.1-0.5 m tall	-	0.1	0.5
-	to 1-3 m tall	-	1 1-3	-

Sheet1

-	2-5 m tall	-		2	5
-	1-3 m tall	-		1	3
-	1-2.5 m tall	-		1	2.5
-	to 4 m tall	-	-		4
scandent	to 3 m tall	-	-		3
-	to 1.5 m tall	-	-		1.5
-	to 3 m tall	-	-		3
-	to 2 m tall	-	-		2
-	to 2 m tall	-	-		2
-	-	-	-	-	
-	ca. 1 m tall		1-	-	
-	to 1.5-2 m tall	-		1.5 1.5-2	
-	-	-	-	-	
-	to 0.5 m tall	-	-		0.5
-	2-3 m tall	-		2	3
-	to 7 m tall	-	-		7
-	0.35 m tall		0.35-	-	
creeping	-	-	-	-	
-	to 3 m tall	-	-		3
scandent	to 2 m tall	-	-		2
-	to 3 m tall	-	-		3
-	to 2.5 m tall	-	-		2.5
-	-	-	-	-	
-	1.5-8 m tall	-		1.5	8
-	to 1 m tall	-	-		1
-	to 3 m tall	-	-		3
-	to 1.5-4 m tall	-		1.5 1.5-4	
-	to 1.6 m tall	-	-		1.6
-	to 1 m tall	-	-		1
-	to 8 m tall	-	-		8
-	to 2.5 m tall	-	-		2.5
-	to 1-3.5 m tall	-		1 1-3.5	
scandent	to 10 m	-	-		10
-	-	-	-	-	
-	1-2 m tall	-		1	2
-	-	-	-	-	
-	to 2 m tall	-	-		2
-	to 3 m tall	-	-		3
-	to 1.5 m tall	-	-		1.5

/inflorescences

Inflorescences |, axillary, or leaf-opposed spikes with minute flowers, solitary or few together, or occasionally spikes arranged

Inflorescences |, solitary or few together, occasionally paniculate;

Inflorescence |, single or few together,

Inflorescence single,

Inflorescence |, single or few together;

Inflorescence |, solitary;

Inflorescence |, single,

Inflorescence |, often in groups of 2-5;

Inflorescence |, single, or several in upper leaf axils,

Inflorescence single,

Inflorescence |, single,

Inflorescence |, solitary;

Inflorescence |, solitary, bifurcate or once-branched;

Inflorescence |, few together;

Inflorescence |, solitary or usually 2(-few) together;

Inflorescence solitary,

Inflorescence |, solitary or few together;

Inflorescence |, solitary;

Inflorescence |, solitary;

Inflorescence |, paniculate;

Inflorescence |, solitary;

Inflorescence |, solitary;

Inflorescence |, solitary or two together,

Inflorescence |, solitary,

Inflorescence single,

Inflorescence |, solitary, simple;

Inflorescence |, solitary;

Inflorescence |, solitary;

Inflorescence |, solitary;

Inflorescence |, solitary;

Inflorescence |, solitary or few together;

Inflorescence solitary, simple,

Inflorescences simple, pedunculate spikes, solitary, leaf-opposed (in *P. peltatum* axillary on reduced, leafless branches, un

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Inflorescence |, white, becoming green;

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Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

[illegible]

/inflorescences/floral bracts

-

floral bracts peltate, mainly rounded, glabrous, often glandular.
floral bracts rounded, glabrous, slightly glandular.
floral bracts rounded to oblong, slightly glandular.
floral bracts rounded, glandular.
floral bracts rounded, umbonate with pale margin,
floral bracts sub-orbicular to oblong.
floral bracts rounded, glandular.
floral bracts rounded, glabrous and black-glandular.
floral bracts rounded, glabrous.
floral bracts rounded, glandular.
floral bracts rounded, glabrous, glandular.
floral bracts rounded, glabrous, glandular.
floral bracts rounded, dentate or fimbriate, glandular.
floral bracts rounded, |, glabrous, glandular.
floral bracts rounded, with scariose margin, glabrous, glandular.
floral bracts rounded, |, glabrous, glandular.
floral bracts rounded, glabrous, glandular.
floral bracts rounded, glabrous, minutely glandular.
floral bracts rounded, glabrous, glandular.
floral bracts, rounded, glabrous.
floral bracts rounded, glabrous, glandular.
floral bracts rounded or oblong, glabrous, glandular;
floral bracts rounded, glabrous and sparsely glandular.
floral bracts rounded, glandular.
floral bracts rounded, glabrous,
floral bracts rounded, glabrous, glandular.
floral bracts rounded, glabrous, glandular.
floral bracts rounded to narrowly oblong, glabrous, glandular.
floral bracts rounded, glabrous, glandular.
floral bracts rounded, glabrous, glandular.
floral bracts rounded, with scariose margin.
floral bracts peltate, rounded, triangular or cucullate, subtending reduced flowers.
floral bracts densely marginally fringed;
floral bracts densely marginally fringed;
floral bracts marginally fringed.
floral bracts small, rounded peltate, glabrous, caducous;
floral bracts cucullate, glabrous;
floral bracts cucullate, glabrous.
floral bracts cucullate, not fringed, often greyish when dried;
floral bracts |, densely marginally fringed, conspicuously arranged in whorls;
floral bracts densely marginally fringed.
floral bracts saccate or galeate, glabrous, densely fimbriate;
floral bracts densely marginally fringed.
floral bracts cucullate, pilose on inner side.
floral bracts trigonous, densely marginally fringed.
floral bracts narrowly sublunulate, sparsely puberulous.
floral bracts triangular-subpeltate, marginally fringed.
floral bracts marginally fringed;
floral bracts densely marginally fringed.
floral bracts cucullate, glabrous;
floral bracts rounded to trigonous, densely marginally fringed.

floral bracts marginally fringed.
floral bracts cucullate and pilose on inner side and at base.
floral bracts cucullate, glabrous or dorsally puberulent.
floral bracts |, densely marginally fringed;
floral bracts marginally fringed.
floral bracts densely marginally fringed.
floral bracts densely marginally fringed.
floral bracts cucullate, inflexed, glabrous.
floral bracts dorsally fringed, crowded.
floral bracts densely marginally fringed.
floral bracts ciliate and hirtellous.
floral bracts glabrous to papillate.
floral bracts rounded to cucullate, sparsely fringed, with central dark gland;
floral bracts densely marginally fringed;
floral bracts densely marginally fringed,
floral bracts densely crowded, spirally arranged, densely marginally fringed.
floral bracts glabrous, slightly cucullate.
floral bracts pubescent at base, densely marginally fringed;
floral bracts densely marginally fringed.
floral bracts triangular, densely marginally fringed.
floral bracts densely marginally fringed.
floral bracts densely marginally fringed.
floral bracts glabrous.
floral bracts triangular-rounded to cucullate, glabrous.
floral bracts cucullate and pilose on inner side and at base,
floral bracts marginally fringed.
floral bracts subtriangular, densely marginally fringed.
floral bracts densely marginally fringed.
floral bracts cucullate, glabrous.
floral bracts cucullate-inflexed, densely marginally fringed.
floral bracts marginally fringed;
floral bracts densely marginally fringed.
floral bracts glabrous or sparsely puberulous.
floral bracts pilose on inner side and at base.
floral bracts densely marginally fringed.
floral bracts densely marginally fringed;
floral bracts densely marginally fringed.
floral bracts |, marginally fringed, conspicuously arranged in whorls.
floral bracts densely marginally fringed.

Sheet1

/inflorescences/floral bracts/shape	/inflorescences/floral bracts/shape
0	0
6274	10000000
6274	10000000
6353	1000
6274	10000000
6274	10000000
5123	100
6274	10000000
6274	10000000
6274	10000000
6274	10000000
6274	10000000
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6274	10000000
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6274	10100000
0	0
0	0
0	0
6274	10000000
2215	100000000
2215	100000000
2215	100000000
0	0
0	0
0	0
0	0
2215	100000000
0	0
0	0
7135	100000
0	0
0	0
2215	100000000
6274	10000000

Sheet1

0	0
2215	100000000
2215	100000000
0	0
0	0
0	0
0	0
2215	100000000
0	0
0	0
0	0
0	0
6311	1000000
0	0
0	0
0	0
2215	100000000
0	0
0	0
7135	100000
0	0
0	0
0	0
2215	111000000
2215	100000000
0	0
7135	10000
0	0
2215	100000000
2215	100000000
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0

Sheet1

/inflorescences/floral bracts/shape	/inflorescences/floral bracts/margin type
-	0
rounded	0
rounded	0
rounded to oblong	0
rounded	0
rounded	0
orbicular to oblong	0
rounded	0
rounded	0
rounded	0
rounded	0
rounded	0
rounded	0
rounded	43
rounded	0
rounded	0
rounded	0
rounded	0
rounded	0
rounded	0
rounded	0
rounded	0
rounded	0
rounded	0
rounded or oblong	0
rounded	0
rounded	0
rounded	0
rounded	0
rounded	0
oblong,rounded	0
rounded	0
rounded	0
rounded	0
rounded,triangular	0
-	0
-	0
-	0
rounded	0
cucullate	0
cucullate	0
cucullate	0
-	0
-	0
-	0
-	0
cucullate	0
-	0
-	0
triangular	0
-	0
-	0
cucullate	0
rounded	0

Sheet1

-	0
cucullate	0
cucullate	0
-	0
-	0
-	0
-	0
cucullate	0
-	0
-	0
-	0
-	0
rounded to cucullate	0
-	0
-	0
-	0
cucullate	0
-	0
-	0
triangular	0
-	0
-	0
-	0
cucullate,rounded,rounded to cucullate	0
cucullate	0
-	0
subtriangular	0
-	0
cucullate	0
cucullate	0
-	0
-	0
-	0
-	0
-	0
-	0
-	0
-	0
-	0
-	0

Sheet1

[illegible]

Sheet1

/inflorescences/floral bracts/hairs	/inflorescences/floral bracts/hairs	/inflorescences/floral bracts/hairs
0		0 -
71		1 glabrous
71		1 glabrous
0		0 -
0		0 -
0		0 -
0		0 -
0		0 -
71		1 glabrous
71		1 glabrous
0		0 -
71		1 glabrous
71		1 glabrous
0		0 -
71		1 glabrous
71		1 glabrous
71		1 glabrous
71		1 glabrous
71		1 glabrous
71		1 glabrous
71		1 glabrous
71		1 glabrous
71		1 glabrous
71		1 glabrous
0		0 -
71		1 glabrous
71		1 glabrous
71		1 glabrous
71		1 glabrous
71		1 glabrous
71		1 glabrous
0		0 -
0		0 -
0		0 -
0		0 -
0		0 -
71		1 glabrous
71		1 glabrous
71		1 glabrous
0		0 -
0		0 -
0		0 -
71		1 glabrous
0		0 -
316		1000 pilose
0		0 -
351		100 puberulous
0		0 -
0		0 -
0		0 -
71		1 glabrous
0		0 -

Sheet1

0	0 -
316	1000 pilose
71	11 glabrous, puberulent
0	0 -
0	0 -
0	0 -
0	0 -
71	1 glabrous
0	0 -
0	0 -
1	1010000 ciliate, hirtellous
71	1 glabrous
0	0 -
0	0 -
0	0 -
0	0 -
71	1 glabrous
386	100000 pubescent
0	0 -
0	0 -
0	0 -
0	0 -
71	1 glabrous
71	1 glabrous
316	1000 pilose
0	0 -
0	0 -
0	0 -
71	1 glabrous
0	0 -
0	0 -
0	0 -
71	101 glabrous, puberulous
316	1000 pilose
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -

Sheet1

[illegible]

Sheet1

[illegible][illegible]

Sheet1

/inflorescences/floral bracts/colour	/inflorescences/growth form	/inflorescences/growth form
-	0	0
-	0	0
-	43	1000000
-	43	1000000
-	0	0
-	43	1000000
-	43	1000000
-	0	0
black	52	100000000
-	0	0
-	43	1000000
-	0	0
-	0	0
-	106	10
-	43	1000000
-	43	1000000
-	0	0
-	0	0
-	0	0
-	0	0
-	0	0
-	0	0
-	43	1000000
-	43	1000000
-	0	0
-	0	0
-	0	0
-	0	0
-	43	1000000
-	0	0
-	0	0
-	0	0
red	0	0
-	106	10
-	127	10000000000
-	43	1000000
-	43	1000000
-	43	1000000
-	43	1000000
greyish	43	1000000
-	43	1000000
-	106	110
-	43	1000000
-	106	10
-	43	1000000
-	53	100000
-	106	10
-	0	10000
-	106	10
-	43	1000000
-	106	10
-	43	1000000

Sheet1

-	0	0
-	106	10
-	43	1000000
-	43	1000000
-	0	1000000000000
-	43	1000000
-	106	10
-	43	1000000
-	43	1000000
-	0	1000000000
-	43	1000000
-	43	1000000
-	43	1000000
-	106	10
-	43	1000000
-	43	1000000
-	43	1000000
-	0	1
-	106	10
-	43	1000000
-	0	10000000
-	106	10
-	106	10
-	106	10
-	43	1000000
-	43	1000000
-	43	1000000
-	43	1000000
-	43	1000000
-	0	1000
-	43	1000000
-	0	1000000000000
-	43	1000000
-	106	10
-	53	100000
-	0	0
-	43	1000000
-	43	1000000
-	43	1000000

Sheet1

/inflorescences/growth form	/inflorescences/growth form/growth form
-	0
-	0
erect	43
erect	43
-	0
erect	43
erect	43
-	0
erect to pendent	52
-	0
erect	43
-	0
-	0
pendent	106
erect	43
erect	43
-	0
-	0
-	0
-	0
-	0
-	0
erect	43
erect	43
-	0
-	0
-	0
-	0
erect	43
-	0
-	0
-	0
-	0
pendent	106
recurved	127
erect	43
erect	43
erect	43
erect	43
erect	43
erect	43
pendent, may be erect or horizontal at first	43
erect	43
pendent	106
erect	43
erect or pendent	53
pendent	106
pendent under leaves	106
pendent	106
erect	43
pendent	106
erect	43

Sheet1

-	0
pendent	106
erect	43
erect	43
usually pendent	106
erect	43
pendent	106
erect	43
erect	43
erect or slightly curved	43
erect	43
erect	43
erect	43
pendent	106
erect	43
erect	43
erect	43
horizontally oriented? later recurved	127
pendent	106
erect	43
erect and recurved	43
pendent	106
pendent	106
pendent	106
erect	43
erect	43
erect	43
erect	43
erect	43
presumably pendent	106
erect	43
erect or horizontally oriented	43
erect	43
pendent	106
erect or pendent	53
-	0
erect	43
erect	43
erect	43

Sheet1

/inflorescences/growth form/growth form /inflorescences/growth form/growth form

0 -
0 -
100 erect
100 erect
0 -
100 erect
100 erect
0 -
1000 erect to pendent
0 -
100 erect
0 -
0 -
1 pendent
100 erect
100 erect
0 -
0 -
0 -
0 -
0 -
0 -
100 erect
100 erect
0 -
0 -
0 -
0 -
100 erect
0 -
0 -
0 -
0 -
1 pendent
10000 recurved
100 erect
100 erect
100 erect
100 erect
100 erect
100 erect
101 erect,pendent
100 erect
1 pendent
100 erect
10 erect or pendent
1 pendent
1 pendent
1 pendent
100 erect
1 pendent
100 erect

Sheet1

0 -
1 pendent
100 erect
100 erect
1 pendent
100 erect
1 pendent
100 erect
100 erect
100 erect
100 erect
100 erect
100 erect
100 erect
1 pendent
100 erect
100 erect
100 erect
10000 recurved
1 pendent
100 erect
10100 erect, recurved
1 pendent
1 pendent
1 pendent
100 erect
100 erect
100 erect
100 erect
100 erect
1 pendent
100 erect
100 erect
100 erect
1 pendent
10 erect or pendent
0 -
100 erect
100 erect
100 erect

/inflorescences/peduncle

-

-

peduncle not slender, |, green;

peduncle slender, |, glabrous or minutely pubescent, red;

peduncle |, pubescent or crisp-pubescent;

peduncle |, minutely hirtellous, without bracts;

peduncle slender, |, pinkish;

peduncle not slender, |, minutely pubescent to glabrous, winged, green;

peduncle |, glabrous, black-glandular;

peduncle slender, |, glabrous, green;

peduncle not slender, |, glabrous or minutely puberulent;

peduncle not slender, |, minutely pubescent, green;

common peduncle green, not slender,

peduncle not slender, |, glabrous or minutely pubescent or papillose, red or brown;

peduncle slender (when dried) or not slender, |, glabrous, green or pinkish;

peduncle |, villous, green or reddish brown;

both the common peduncle and those of individual spikes bracteate, green or pinkish, slender (when dried) or not slender

peduncle slender, |, glabrous or minutely pubescent, green;

peduncle slender, |, green;

peduncle |, densely velvety pubescent, green;

peduncle slender, |, with 2-3 caducous bracts, green;

peduncle not slender, |, glabrous or minutely pubescent;

peduncle not slender, |, pubescent, 2-bracteate, red, brownish or green;

peduncle not slender, |, green;

peduncle not slender, often bracteate, |, longer than spike, pubescent, sometimes red;

peduncle |, minutely pubescent;

peduncle not nodose, without bract, |, pubescent or glabrous;

peduncle nodose or with 1-2 caducous bracts, not slender, |, crisp-pubescent, not winged, green;

peduncle not slender, |, glabrous, green;

peduncle |, minutely pubescent, green;

peduncle slender, |, red;

peduncle |, crisp-pubescent, 1-2 bracteate;

-

peduncle |, sometimes reddish tinged, crisp-pubescent or villous;

peduncle |, sparsely pubescent;

peduncle slender,

peduncle

peduncle |, glabrous;

peduncle |, retrorsely pubescent;

peduncle

peduncle moderately stout,

peduncle glandular-dotted, |, red to brown;

peduncle |, minutely pubescent;

peduncle slender, |, pubescent;

peduncle |, glabrous;

peduncle |, glabrous;

peduncle |, densely pubescent;

peduncle |, pilose, glabrescent;

peduncle |, densely pubescent;

peduncle |, glabrous;

peduncle |, glabrescent;

peduncle |, glabrous;

peduncle stout, |, pubescent;
peduncle |, pilose, often red;
peduncle |, pubescent, green;
peduncle |, puberulent to glabrous;
peduncle |, glabrous;
peduncle |, crisp-pubescent;
peduncle |, slender, glabrous, green to reddish;
peduncle |, glabrescent;
peduncle filiform,
peduncle |, crisp-pubescent;
peduncle
peduncle |, glabrous;
peduncle filiform, |, sparsely pubescent;
peduncle |, long-hirsute;
peduncle |, pubescent;
peduncle |, crisp-pubescent;
peduncle |, villous;
peduncle |, pubescent or glabrescent;
peduncle slender, |, glabrous;
peduncle slender,
peduncle |, glabrous;
peduncle slender, |, glabrous, often reddish or violaceous;
peduncle
peduncle |, pubescent to glabrescent;
peduncle |, glabrous or hirsute;
common peduncle |, peduncles slender,
peduncle |, glabrous;
peduncle
peduncle |, glabrous;
peduncle |, minutely pubescent or glabrous;
peduncle |, brown crisp-pubescent;
peduncle |, pubescent;
peduncle |, glabrous or minutely puberulous;
peduncle rather stout, |, glabrous;
peduncle
peduncle
peduncle |, pubescent;
peduncle
peduncle |, crisp-pubescent;

Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

/inflorescences/peduncle/hairs	/inflorescences/peduncle/hairs	/inflorescences/peduncle/hairs
0	0	0 -
0	0	0 -
0	0	0 -
71	100000000001	glabrous, pubescent
386	100000000000	pubescent
176	100000000000	hirtellous
0	0	0 -
391	10	pubescent to glabrous
71	1	glabrous
71	1	glabrous
71	1000001	glabrous, puberulent
386	100000000000	pubescent
0	0	0 -
71	100000000001	glabrous, pubescent
71	1	glabrous
596	10000	villous
386	100000000000	pubescent
71	100000000001	glabrous, pubescent
0	0	0 -
386	100000000000	pubescent
0	0	0 -
71	100000000001	glabrous, pubescent
386	100000000000	pubescent
0	0	0 -
386	100000000000	pubescent
386	100000000000	pubescent
392	100000	pubescent or glabrous
386	100000000000	pubescent
71	1	glabrous
386	100000000000	pubescent
0	0	0 -
386	100000000000	pubescent
0	0	0 -
420	10000000000000	pubescent or villous
386	100000000000	pubescent
0	0	0 -
0	0	0 -
71	1	glabrous
386	100000000000	pubescent
0	0	0 -
0	0	0 -
0	0	0 -
386	100000000000	pubescent
386	100000000000	pubescent
71	1	glabrous
71	1	glabrous
386	100000000000	pubescent
71	10000000100	glabrescent, pilose
386	100000000000	pubescent
71	1	glabrous
71	100000000000	glabrescent
71	1	glabrous

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386	100000000000 pubescent
316	100 pilose
386	100000000000 pubescent
356	100000000 puberulent to glabrous
71	1 glabrous
386	100000000000 pubescent
71	1 glabrous
71	100000000000 glabrescent
0	0 -
386	100000000000 pubescent
0	0 -
71	1 glabrous
386	100000000000 pubescent
141	10000000 hirsute
386	100000000000 pubescent
386	100000000000 pubescent
596	10000 villous
392	1000000000 pubescent or glabrescent
71	1 glabrous
0	0 -
71	1 glabrous
71	1 glabrous
0	0 -
391	1000000000000000 pubescent to glabrescent
79	1000000000000000 glabrous or hirsute
0	0 -
71	1 glabrous
0	0 -
71	1 glabrous
392	100000 pubescent or glabrous
386	100000000000 pubescent
386	100000000000 pubescent
71	1001 glabrous, puberulous
71	1 glabrous
0	0 -
0	0 -
386	100000000000 pubescent
0	0 -
386	100000000000 pubescent

Sheet1

/inflorescences/peduncle/colour	/inflorescences/peduncle/colour	/inflorescences/peduncle/colour
0	0 -	
0	0 -	
782	1000000 green	
1705	1 red	
0	0 -	
0	0 -	
1563	1000 pinkish	
782	1000000 green	
143	10000 black	
782	1000000 green	
0	0 -	
782	1000000 green	
782	1000000 green	
1715	10000000000 red or brown	
826	100 green or pinkish	
285	100101000000 brown,green,green or reddish	
826	100 green or pinkish	
782	1000000 green	
782	1000000 green	
782	1000000 green	
782	1000000 green	
0	0 -	
307	100001 brownish or green,red	
782	1000000 green	
1705	1 red	
0	0 -	
0	0 -	
782	1000000 green	
782	1000000 green	
782	1000000 green	
1705	1 red	
0	0 -	
0	0 -	
1705	10000000000 reddish	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
1714	10 red to brown	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
0	0 -	

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0	0 -
1705	1 red
782	1000000 green
0	0 -
0	0 -
0	0 -
829	10000000 green to reddish
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
1705	1000000000 reddish
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
285	100000000000 brown
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -

Sheet1

/inflorescences/peduncle/length		/inflorescences/peduncle/length
-		-
-		-
0.3-1.5 cm long		-
2-3 cm long		-
0.7-3.2 cm long		-
0.3-0.5 cm long		-
to 1 cm long		-
0.2-1.2 cm long		-
0.5-1.5 cm long		-
1.5-1.7 cm long		-
3.5-5 cm long		-
1.5-5.5 cm long		-
2-6 cm long		-
to 1.5 cm long		-
1-8 cm long		-
1-2 cm long		-
1-14 cm long		-
to 1.5 cm long		-
to 1 cm long		-
5 cm long		5
3-7 cm long		-
0.5-2.5 cm long		-
0.5-4 cm long		-
up to 1.7 cm long		-
3-6 cm long		-
0.8-3.7 cm long		-
up to 1 cm long		-
to 3 cm long		-
0.4-1.5 cm long		-
to 2 cm long		-
1-4 cm long		-
2-4 cm long		-
-		-
0.5-1.1 cm long		-
0.7-1.2 cm long		-
1-1.5 cm long		-
to 1.2 cm long		-
0.8-1.5 cm long		-
0.2-0.4 cm long		-
0.5-1 cm long		-
0.5-1 cm long		-
1-2 cm long		-
1 cm long		1
0.5-1 cm long		-
1 cm long		1
0.5-1.1 cm long		-
0.3-0.4 (0.8 in fruit) cm long		-
1-2 cm long		-
1-3 cm long		-
0.8-1.6 cm long		-
to 0.5 cm long		-
0.5-1 cm long		-

Sheet1

0.5-1.5 cm long	-	
0.9-1.6 cm long	-	
to 1 cm long	-	
0.5-1 cm long	-	
0.5-0.8 cm long	-	
0.4-1.5 cm long	-	
1-1.2 cm long	-	
ca. 0.5 cm long		0.5
1-1.5 cm long	-	
0.5 cm long		0.5
0.2-0.6 cm long	-	
to 1.5 cm long	-	
to 3 cm long	-	
0.5-1.2 cm long	-	
to 1 cm long	-	
1 cm long, to 1.5 cm in fruit	-	
1.5-2.5 cm long	-	
0.8-2 cm long	-	
1.5-2.5 cm long	-	
1-3.5 cm long	-	
1 cm long		1
0.5-1.8 cm long	-	
1-2.5 cm long	-	
2-5 cm long	-	
0.5-1 cm long	-	
common peduncle 2-8 cm long , peduncles 1-1.5 cm long	-	
1-2 cm long	-	
0.4-0.7 cm long	-	
0.4-0.5 cm long	-	
1-1.5 cm long	-	
0.5-8 cm long	-	
1.5-2 cm long	-	
0.7-2 cm long	-	
0.5-0.7 cm long	-	
1-1.5 cm long	-	
ca. 1 cm long		1
1 cm long to ca. 2 cm in fruit		1
0.5-2 cm long	-	
to 0.5 cm long	-	

Sheet1

/inflorescences/peduncle/length/minimum	/inflorescences/peduncle/length/maximum
-	-
-	-
0.3	1.5
2	3
0.7	3.2
0.3	0.5
-	1
0.2	1.2
0.5	1.5
1.5	1.7
3.5	5
1.5	5.5
2	6
-	1.5
1	8
1	2
1	14
-	1.5
-	1
-	-
3	7
0.5	2.5
0.5	4
-	1.7
3	6
0.8	3.7
-	1
-	3
0.4	1.5
-	2
1	4
2	4
-	-
0.5	1.1
0.7	1.2
1	1.5
-	1.2
0.8	1.5
0.2	0.4
0.5	1
0.5	1
1	2
-	-
0.5	1
-	-
0.5	1.1
0.3	0.4
1	2
1	3
0.8	1.6
-	0.5
0.5	1

Sheet1

	0.5	1.5
	0.9	1.6
-		1
	0.5	1
	0.5	0.8
	0.4	1.5
	1	1.2
-	-	
	1	1.5
-	-	
	0.2	0.6
-		1.5
-		3
	0.5	1.2
-		1
-		1.5
	1.5	2.5
	0.8	2
	1.5	2.5
	1	3.5
-	-	
	0.5	1.8
	1	2.5
	2	5
	0.5	1
	2	8
	1	2
	0.4	0.7
	0.4	0.5
	1	1.5
	0.5	8
	1.5	2
	0.7	2
	0.5	0.7
	1	1.5
-	-	
-	-	
	0.5	2
-		0.5

Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

/inflorescences/position/colour /inflorescences/position/colour

[illegible]

Sheet1

/inflorescences/rachises	/inflorescences/rachises/hairs
-	0
rachis glabrous (but hairy in <i>P. tetraphylla</i>);	71
-	0
-	0
-	0
rachis glabrous.	71
-	0
-	0
-	0
-	0
-	0
-	0
-	0
-	0
-	0
rachis hardly ridged;	0
-	0
-	0
-	0
-	0
-	0
-	0
rachis strongly ridged (at least when dried).	0
-	0
-	0
-	0
-	0
-	0
rachis pubescent;	386
-	0
-	0
-	0
rachis glabrous;	71
-	0
rachis glabrous;	71
rachis brownish crisp-pubescent.	386
rachis minutely pubescent;	386
-	0
rachis glabrous;	71
rachis glabrous;	71
rachis glabrous, sometimes red;	71
-	0
rachis glabrous;	71
rachis hirsute;	141
-	0
-	0
-	0
rachis glabrous;	71
-	0
rachis pubescent.	386
-	0

Sheet1

-	0
-	0
rachis glabrous;	71
-	0
-	0
-	0
-	0
-	0
-	0
-	0
rachis glabrous or sparsely pubescent;	71
-	0
-	0
rachis presumably puberulent;	351
-	0
-	0
-	0
-	0
rachis glabrous;	71
rachis papillose;	0
-	0
-	0
-	0
rachis pubescent;	386
rachis pubescent.	386
-	0
-	0
-	0
rachis pubescent;	386
-	0
-	0
-	0
rachis glabrous;	71
-	0
-	0
-	0
-	0
-	0
rachis glabrous;	71

Sheet1

[illegible]

Sheet1

0 -	0
0 -	0
1 glabrous	0
0 -	0
0 -	0
0 -	0
0 -	0
0 -	0
0 -	0
0 -	0
0 -	0
1001 glabrous, pubescent	0
0 -	0
0 -	0
10 puberulent	0
0 -	0
0 -	0
0 -	0
0 -	0
1 glabrous	0
0 -	0
0 -	0
0 -	0
0 -	0
1000 pubescent	0
1000 pubescent	0
0 -	0
0 -	0
0 -	0
1000 pubescent	0
0 -	0
0 -	0
0 -	0
1 glabrous	0
0 -	0
0 -	0
0 -	0
0 -	0
0 -	0
1 glabrous	0

Sheet1

/inflorescences/rachises/colour /inflorescences/rachises/colour

0 -

0 -

0 -

0 -

0 -

0 -

0 -

0 -

0 -

0 -

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0 -

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0 -

0 -

0 -

0 -

10 brownish

0 -

0 -

0 -

0 -

0 -

0 -

0 -

0 -

0 -

0 -

0 -

0 -

0 -

0 -

0 -

/inflorescences/spikes

-

-

spike |, yellow;
 spike |, moderately to densely flowered;
 spike |, green, densely to laxly flowered;
 spike with scattered flowers,
 spike |, laxly flowered;
 spike |, pale yellow to green, laxly flowered;
 spike |, moderately densely flowered, flowers distinctly separate;
 spike laxly flowered, |, green;
 spike |, reddish;
 spike |, densely flowered;
 spike densely flowered, erect, |, whitish or yellowish green;
 spike |, yellow to green, densely flowered;
 spike |, green, white or yellow, densely flowered;
 spike |, green, densely flowered,
 spikes |, greenish white to yellow, densely flowered;
 spike |, sparsely to densely flowered;
 spike
 spikes |, green, densely flowered;
 spike |, green;
 spike erect, |, yellow or pale green or greenish white, laxly flowered;
 spike |, green or yellow-green, laxly to moderately flowered;
 spike |, densely flowered, green;
 spike |, green or yellow, densely flowered;
 spike
 spike |, yellow to red, moderately to densely flowered;
 spike |, pale green, densely flowered;
 spike |, green, flowers distinctly separate;
 spike |, cream-white;
 spike loosely flowered, erect, |, white or green;
 spike |, about as long as peduncle;
 -
 spike |, green to pale or dark yellow, apiculate;
 spike |, white to green, apiculate;
 spike |, white or green, apiculate or not;
 spike |, white turning green, not apiculate;
 spike |, not apiculate;
 spike almost globose, |, apiculate;
 spike |, white, yellow or (greyish) green, apiculate;
 spike |, whitish, yellow or pale green, apiculate, densely flowered;
 spike
 spike |, not apiculate;
 spike |, white, yellow or green, occasionally apiculate or not;
 spike |, green, not apiculate;
 spike |, white, not apiculate;
 spike |, not apiculate?;
 spike
 spike |, yellow, not apiculate;
 spike |, white, not apiculate;
 spike erect, |, white, yellow to green, apiculate;
 spike |, white, apiculate;

spike

spike |, not apiculate;

spike |, white, yellow or green, apiculate;

spike |, white to yellow, not apiculate;

spike |, whitish, pale yellow or green, apiculate;

spike |, pink, apiculate;

spike |, white, yellowish to green, not apiculate;

spike |, apiculate;

spike |, apiculate;

spike |, apiculate;

spike |, green, not apiculate;

spike |, apiculate;

spike |, apiculate;

spike |, hardly apiculate;

spike |, white, cream or pale green, not apiculate;

spike |, white or yellow;

spike |, green or yellow or rosish, not apiculate;

spike protandrous (presenting staminate flowers first, pistillate flowers afterwards), |, green, not apiculate;

spike |, not apiculate;

spike |, white, yellowish or greyish-green, apiculate;

spike

spike |, green, yellow to reddish, apiculate;

spike |, apiculate or not;

spike |, reddish when young, apiculate;

spike |, yellow or green, apiculate;

spikes numerous, |, each subtended by a single prophyll, densely flowered;

spike |, greenish white to white, apiculate;

spike |, not apiculate;

spike |, green, apiculate;

spike |, yellow to green, apiculate;

spike |, white to yellowish, apiculate;

spike |, creamish white to green, hardly apiculate;

spike |, white or greyish, not aciculate;

spike |, not apiculate;

spike |, apiculate;

spike

spike |, often reddish or pink, apiculate;

spike

spike |, reddish, pinkish or brownish, apiculate;

Sheet1

/inflorescences/spikes/shape	/inflorescences/spikes/shape	/inflorescences/spikes/shape
0	0 -	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
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0	0 -	
0	0 -	
0	0 -	
616	10 apiculate	
616	10 apiculate	
616	10 apiculate	
616	10 apiculate	
616	10 apiculate	
616	11 apiculate,globose	
616	10 apiculate	
616	10 apiculate	
0	0 -	
616	10 apiculate	
616	10 apiculate	
616	10 apiculate	
616	10 apiculate	
616	10 apiculate	
0	0 -	
616	10 apiculate	
616	10 apiculate	
616	10 apiculate	
616	10 apiculate	

Sheet1

0	0 -
616	10 apiculate
616	10 apiculate
616	10 apiculate
616	10 apiculate
616	10 apiculate
616	10 apiculate
616	10 apiculate
616	10 apiculate
616	10 apiculate
616	10 apiculate
616	10 apiculate
616	10 apiculate
616	10 apiculate
616	10 apiculate
0	0 -
616	10 apiculate
616	10 apiculate
616	10 apiculate
616	10 apiculate
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616	10 apiculate
616	10 apiculate
616	10 apiculate
616	10 apiculate
0	0 -
616	10 apiculate
616	10 apiculate
616	10 apiculate
616	10 apiculate
616	10 apiculate
0	0 -
616	10 apiculate
616	10 apiculate
0	0 -
616	10 apiculate
0	0 -
616	10 apiculate

Sheet1

/inflorescences/spikes/growth form /inflorescences/spikes/growth form

[illegible]

Sheet1

O O

[illegible]

Sheet1

/inflorescences/spikes/growth form	/inflorescences/spikes/colour	/inflorescences/spikes/colour
-	0	0
-	0	0
-	2486	1000000000000000000000
-	1705	1000000000000000
-	782	1000000000000100
-	1705	1000000000000000
-	1705	1000000000000000
-	1705	1000000010000000000000
-	1705	1000000000000000
-	782	1000000000000100
-	1705	100000
-	1705	1000000000000000
erect	782	1000000100000000000000
-	1705	1000000010000000000000
-	782	111000000000000100
-	782	1000000000000100
-	782	1100000001000010
-	1705	1000000000000000
-	0	0
-	782	1000000000000100
-	782	100
erect	782	1000000110000000000000
-	852	10000000000
-	782	1000000000000100
-	852	10000000000
-	0	0
-	2535	1000000000000000000000
-	782	1000000000000100
-	782	100
-	498	10010000000000000000
erect	1705	110000000000000000
-	0	0
-	0	0
-	782	1000000000000000000000
-	2438	1.000000000000000E+024
-	2439	1.000000000000000E+025
-	782	10000000000000100
-	0	0
-	0	0
-	782	1000000100000000000000
-	782	1100000010000000000000
-	0	0
-	0	0
-	2415	1000000100000000000000
-	782	100
-	2415	1000000000000000
-	0	0
-	0	0
-	2486	1000000000000000000000
-	2415	1000000000000000
erect	2415	1000000100000000000000
-	2415	1000000000000000

Sheet1

-	0	0
-	0	0
-	2415	100000010000000000000000
-	2484	1000000
-	2415	110000000000000000000000
-	1563	1000000000000000000000
-	2415	1010000000000000000000
-	0	0
-	0	0
-	0	0
-	782	100
-	0	0
-	0	0
-	0	0
-	498	1001000000000000000000
-	2485	1000000000000000000000
-	852	100000000000
-	782	100
-	0	0
-	782	1011000010000100
-	0	0
-	782	100000000000000100000000
-	0	0
-	1705	100000
-	2510	10000
-	1705	1000000000000000
-	782	10000000000000010
-	0	0
-	782	100
-	2509	1
-	2484	1000000000
-	498	1.00000100100000E+024
-	2441	1000000000000000000000
-	0	0
-	0	0
-	0	0
-	1751	100000000000000000000000
-	0	0
-	1573	100000100000

Sheet1

/inflorescences/spikes/colour	/inflorescences/spikes/length
-	-
-	-
yellow	6-14 cm long
red	10-16 cm long
green,red	2.5-15 cm long
red	0.6-3 cm long
red	to 1.5 cm long
red,yellow	up to 15 cm long
red	to 16 cm long
green,red	4-6 cm long
reddish	2-5 cm long
red	3-5 cm long
green,red,whitish,whitish or yellowish	4-11 cm long
red,yellow	to 30 cm long
green,red,white,white or yellow	to 18 cm long
green,red	2-7 cm long
greenish,red,white,white to yellow	to 18 cm long
red	1.5-5.5 cm long
-	1-6 cm long
green,red	4-8 cm long
green	17 cm long
green,red,white,yellow	5-7 cm long
green or yellow	up to 6 cm long
green,red	1-3.5 (according to Henkel 946, to 10) cm long
green or yellow	1-2.5 cm long
-	2.2-6 cm long
yellow to red	2-6 cm long
green,red	up to 1.7 cm long
green	1.7-4 cm long
cream,white	up to 4 cm long
red,white	2.5-5 cm long
-	1.5-5 cm long
-	-
green,yellow	1-5 cm long
white to green	8-15 cm long
white or green	to 10 cm long
green,white	5-8 cm long, to 12 cm in fruit
-	6-7 cm long
-	to 1 x 1.5 cm
green,greenish,white,yellow	2.5-4 cm long
green,red,whitish,yellow	5-10 cm long
-	4-20 cm long
-	0.5-1 x 0.1-0.2 cm long, in fruit 2.5-4.5 x 0.3-0.45 cm
white,yellow	3-5.5 cm long
green	10-12 cm long
white	1-1.7 cm long
-	1-1.5 cm long
-	to 5.5 cm long
yellow	20-60 cm long
white	2-8 cm long
white,yellow	1.5-2.5 cm long
white	8-11 cm long

Sheet1

-	12-15 x 0.5-0.7 cm
-	2.5-5 cm long
white,yellow	3.5-4.5 cm long
white to yellow	7-8 cm long
whitish,yellow	3-6 cm long
pink	to 16 cm long
white,yellowish	5-8 cm long
-	0.5-3 cm long
-	2 cm long
-	4-6 cm long
green	3.5-7 cm long
-	to 6 cm long
-	1-1.7 cm long
-	1-3 cm long
cream,green,white	8-14 cm long
white or yellow	10-12 cm long
green or yellow	2-4 cm long
green	1-3.5 cm long
-	1.5-5 cm long
green,greish,white,yellowish,yellowish or greyish	7-13 cm long
-	10-13 cm long
green,reddish,yellow,yellow to reddish	1-5 cm long
-	5-10 cm long
reddish	(8-)20-60 cm long
yellow or green	2-4 cm long
red	5-10 cm long
greenish,white	7-9.5 cm long
-	2-4 cm long
green	4-7 cm long
yellow to green	7-16.5 cm long
white to yellowish	5-8 cm long
cream,green,white,white to green	10-20 cm long
white or greyish	6-12 cm long
-	1 cm long
-	5-9 cm long
-	ca. 4 cm long
reddish or pink	8-9 cm long, in fruit to 11 cm long
-	2-11 cm long
pinkish or brownish,reddish	to 8 cm long

Sheet1

/inflorescences/spikes/length	/inflorescences/spikes/length/minimum
-	-
-	-
-	6
-	10
-	2.5
-	0.6
-	-
-	-
-	-
-	4
-	2
-	3
-	4
-	-
-	-
-	2
-	-
-	1.5
-	1
-	4
17 -	-
-	5
-	-
-	1
-	1
-	2.2
-	2
-	-
-	1.7
-	-
-	2.5
-	1.5
-	-
-	1
-	8
-	-
-	5
-	6
-	-
-	2.5
-	5
-	4
-	0.5
-	3
-	10
-	1
-	1
-	-
-	20
-	2
-	1.5
-	8

Sheet1

-		12
-		2.5
-		3.5
-		7
-		3
-	-	
-		5
-		0.5
	2 -	
-		4
-		3.5
-	-	
-		1
-		1
-		8
-		10
-		2
-		1
-		1.5
-		7
-		10
-		1
-		5
-		20
-		2
-		5
-		7
-		2
-		4
-		7
-		5
-		10
-		6
	1 -	
-		5
	4 -	
-		8
-		2
-	-	

Sheet1

/inflorescences/spikes/length/maximum	/infructescences
-	-
-	-
	14 -
	16 -
	15 -
	3 -
	1.5 -
	15 -
	16 -
	6 -
	5 -
	5 -
	11 -
	30 -
	18 -
	7 -
	18 -
	5.5 -
	6 -
	8 -
-	-
	7 -
	6 -
	10 -
	2.5 -
	6 -
	6 -
	1.7 -
	4 -
	4 -
	5 -
	5 -
-	-
	5 -
	15 Infructescence recurved;
	10 Infructescence (grey-)green;
	12 -
	7 -
	1 Infructescence erect, green;
	4 Infructescence
	10 -
	20 -
	1 -
	5.5 -
	12 -
	1.7 Infructescence erect, green;
	1.5 Infructescence pendent,
	5.5 Infructescence pendent;
	60 -
	8 Infructescence pendent, , green;
	2.5 Infructescence , green or brownish;
	11 Infructescence erect, green;

Sheet1

15 -
5 -
4.5 Infructescence |, green;
8 -
6 Infructescence
16 -
8 -
3 -
-
6 -
7 Infructescence erect,
6 Infructescence
1.7 -
3 -
14 Infructescence grey or grey green;
12 Infructescence green,
4 Infructescence occasionally pendent;
3.5 -
5 Infructescence
13 Infructescence green, erect or pendent;
13 -
5 Infructescence pendent, green;
10 Infructescence pendent, |, more than
60 -
4 Infructescence erect, |, green;
10 -
9.5 Infructescence
4 Infructescence erect to pendent,
7 Infructescence
16.5 Infructescence
8 Infructescence erect;
20 -
12 -
- Infructescence recurved,
9 -
-
11 -
11 -
8 -

Sheet1

/infructescences/growth form /infructescences/growth form /infructescences/growth form

[illegible]

Sheet1

0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
43	100 erect
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
106	10 pendent
0	0 -
0	0 -
53	1 erect or pendent
0	0 -
106	10 pendent
106	10 pendent
0	0 -
43	100 erect
0	0 -
0	0 -
52	1000 erect to pendent
0	0 -
0	0 -
43	100 erect
0	0 -
0	0 -
127	10000 recurved
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -

Sheet1

/infructescences/colour	/infructescences/colour	/infructescences/colour
0	0	-
0	0	-
0	0	-
0	0	-
0	0	-
0	0	-
0	0	-
0	0	-
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0	0	-
0	0	-
0	0	-
0	0	-
0	0	-
0	0	-
0	0	-
0	0	-
782	110 green,grey	
0	0	-
0	0	-
782	100 green	
0	0	-
0	0	-
0	0	-
0	0	-
0	0	-
0	0	-
782	100 green	
0	0	-
0	0	-
0	0	-
782	100 green	
792	1 green or brownish	
782	100 green	

Sheet1

0	0 -
0	0 -
782	100 green
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
782	110 green, grey
782	100 green
0	0 -
0	0 -
0	0 -
782	100 green
0	0 -
782	100 green
0	0 -
0	0 -
782	100 green
0	0 -
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0	0 -
0	0 -

Sheet1

[illegible]

Sheet1

-	-	
-	-	
to 6 cm long , 10 mm wide		6
-	-	
6 x 1 cm (when dried)		6
-	-	
-	-	
-	-	
-	-	
3.5-7 cm long	3.5-7	
to 0.5 cm thick	-	
-	-	
-	-	
-	-	
to 12 cm long , 4 mm wide		12
-	-	
-	-	
to 9 cm long		9
-	-	
-	-	
-	-	
12 cm long , 0.5 cm thick		12
-	-	
to 7 cm long , to 1 cm thick		7
-	-	
to 11.5 cm long		11.5
0.6 cm thick	-	
to 6 cm long		6
to 15 cm long		15
-	-	
-	-	
-	-	
1 cm long , 0.3 cm thick		1
-	-	
-	-	
-	-	
-	-	
-	-	

Sheet1

[illegible]

Sheet1

-	-	
-	-	
	6-	
-	-	
	6-	
-	-	
-	-	
-	-	
-	-	
-	-	
-	-	3.5
-	-	
-	-	
-	-	
	12-	
-	-	
-	-	
	9-	
-	-	
-	-	
-	-	
	12-	
-	-	
	7-	
-	-	
	11.5-	
-	-	
	6-	
	15-	
-	-	
-	-	
-	-	
	1-	
-	-	
-	-	
-	-	
-	-	
-	-	

Sheet1

[illegible]

Sheet1

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-	-	
-		10
-	-	
-		1
-	-	
-	-	
-	-	
-	-	
-	-	
	7-	
-		0.5
-	-	
-	-	
-		4
-	-	
-	-	
-	-	
-	-	
-	-	
-		0.5
-	-	
-		1
-	-	
-		0.6
-	-	
-	-	
-		0.3
-	-	
-	-	
-	-	
-	-	

Sheet1

[illegible]

0.8

Sheet1

-	-
-	-
	10-
-	-
	1-
-	-
-	-
-	-
-	-
-	-
-	0.5-
-	-
-	-
-	-
	4-
-	-
-	-
-	-
-	-
-	-
-	0.5-
-	-
	1-
-	-
-	-
	0.6-
-	-
-	-
-	-
-	-
-	0.3-
-	-
-	-
-	-
-	-
-	-

Sheet1

/infructescences/dimensions (merged)/width/maximum	/infructescences/dimensions (merged)/texture
-	0
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Sheet1

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Sheet1

/internodes	/internodes	/internodes/minimum
-	-	-
-	-	-
internodes winged or ridged below nodes, green or reddish.	-	-
-	-	-
-	-	-
upper internodes 4-10 mm long	-	4
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
internodes 2-6 cm long , green brownish or reddish.	-	2
-	-	-
-	-	-
-	-	-
internodes 0.3-2 cm long , green often with red spots.	-	0.3
internodes 0.5-3 cm long , green.	-	0.5
internodes 0.2-1.6 cm long , green with lilac.	-	0.2
-	-	-
-	-	-
-	-	-
-	-	-
upper internodes densely glandular.	-	-
upper internodes rather slender.	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
upper internodes drying finely ridged.	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Internodes black glandular-dotted, more densely so on nodes.

upper internodes finely striate.

Upper internodes finely striate, glabrescent.

Sheet1

[illegible]

Sheet1

[illegible]

/internodes/colour /internodes/colour

0 -

0 -

100000 green or reddish

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0 -

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0 -

1000 brownish or reddish

0 -

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0 -

101 green,red

100 green

10100 green,lilac

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[illegible]

10 black

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Sheet1

[illegible]

/leaves/blade

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blade |, green above, often reddish brown beneath, |,

-
-

blade basely attached or slightly peltate,

blade |, bright green, |,

blade |, ciliate towards obtuse apex,

blade |, densely black-glandular (when dried), |,

-
-
-

blade |, somewhat ciliate towards apex,

blade |, more or less ciliate,

blade |, often red-dotted, |,

blade |, sometimes pink below, |,

blade shiny green, pale green below, |, often with red spots, |,

blade glandular-dotted,

-
-
-

blade |, maybe sparsely ciliate,

-
-

blade |, dark green above, light green beneath, |,

-
-

blade |, ciliolate towards apex,

-
-
-

blade pale glandular-dotted,

blades basely attached or peltate, symmetrical or asymmetrical, at base often quite some difference in attachment of blade,

blade not conspicuously glandular-dotted,

blade |, yellow-green, |,

blade |, not conspicuously glandular-dotted, shiny green above, pale below, often drying yellowish green, |,

blade not conspicuously glandular-dotted,

-

blade |, not conspicuously glandular-dotted, |,

blade |, somewhat glandular-dotted, often bicoloured, sometimes glaucous or whitish below in vivo, drying silvery shiny, |,

blade shiny green above, lighter to whitish below,

blade glandular-dotted,

blade |, not conspicuously glandular-dotted, |,

blade not conspicuously glandular-dotted,

blade glossy, |, not conspicuously glandular-dotted, |,

blade |, not conspicuously glandular-dotted, |,

blade |, densely glandular-dotted below, |,

blade glandular-dotted,

blade |, not glandular-dotted, |,

blade |, densely glandular-dotted, |,

blade dark green above often with a pale or white band along primary vein, pale green below, not conspicuously glandular-dotted,

blade |, often drying yellowish or greyish green, not scabrous, not conspicuously glandular-dotted below, |,

Sheet1

blade |, not glandular-dotted, |,
blade |, not conspicuously glandular-dotted, |,
blade |, not glandular-dotted, dark green above, more pale below, |,
blade |, not glandular-dotted, |,
blade |, dark glandular-dotted on both sides, |,
blade drying glossy above, |, not conspicuously glandular-dotted, |,
blade |, glandular-dotted, |,
blade |, not conspicuously glandular-dotted, dark green above, pale below, |,
blade |, not glandular- but finely pellucid-dotted,
blade |, glandular-dotted, |,
blade |, not conspicuously glandular-dotted, yellow-green, |,
blade |, densely glandular-dotted, |,
blade |, somewhat glandular-dotted below, |,
blade |, glandular-dotted, |,
blade |, glandular-dotted, often greyish below, |,
blade not conspicuously glandular-dotted, shiny,
blade discolourous, |, not conspicuously glandular-dotted, |,
blade not conspicuously glandular-dotted, |, subobovate or ovate,
blade sometimes discolourous and pale brown beneath, |, not conspicuously glandular-dotted, |,
blade |, discolourous often drying yellowish, conspicuously dark-glandular-dotted, |,
blade not dark glandular-dotted,
blade shiny dark green above, pale below, densely black glandular-dotted, translucent dotted in vivo,
blade |, not glandular-dotted, |,
blade |, not glandular-dotted, |,
blade |, glandular-dotted, |,
blade glandular-dotted,
blade |, densely glandular-dotted below, |,
blade |, glandular-dotted to densely glandular-dotted, |,
blade |, dull green, not conspicuously glandular-dotted, |,
blade |, not conspicuously glandular-dotted, |,
blade not conspicuously glandular-dotted, often drying dull greyish green,
blade |, not conspicuously glandular-dotted, |,
blade |, not glandular-dotted, |,
blade |, densely glandular-dotted on both surfaces, |,
blade not glandular-dotted,
blade |, conspicuously dark-glandular-dotted below, |,
blade sometimes with pale band along primary vein, |, more or less orange glandular-dotted on lower surface, sometimes
-
blade |, glandular-dotted, |,

Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

/leaves/blade/hairs	/leaves/blade/colour	/leaves/blade/colour
-	0	0
-	0	0
-	285	1010000100000
-	0	0
-	0	0
-	0	0
-	782	100000
ciliate	0	0
-	143	1000
-	0	0
-	0	0
-	0	0
ciliate	0	0
ciliate	0	0
-	1705	1
-	1563	10000000000000
-	782	100001
-	0	0
-	0	0
-	0	0
-	0	0
ciliate	0	0
-	0	0
-	0	0
-	782	100000
-	0	0
-	0	0
ciliolate	0	0
-	0	0
-	0	0
-	0	0
-	0	0
glabrous,pubescent	0	0
-	0	0
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-	782	1000100000
-	0	0
-	0	0
-	0	0
-	1705	1000011
-	782	1100000
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-	0	0
-	0	0
-	0	0
-	0	0
-	0	0
-	782	100100
-	782	101100100000

Sheet1

-	0	0
-	0	0
-	782	100000
-	0	0
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-	0	0
-	782	100000
-	0	0
-	0	0
-	782	10100000
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-	285	1000000000000
-	2486	1000000000
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-	143	101000
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-	0	0
-	0	0
-	782	100000
-	0	0
-	782	100000100000
-	0	0
-	0	0
-	0	0
-	0	0
-	0	0
-	1492	10000
-	0	0
-	0	0

/leaves/blade/colour

-

-

brown,green,reddish

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-

-

green

-

black

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-

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-

-

red

pink

green,red

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-

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-

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-

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green

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green,yellow

green,yellowish

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red,silver,whitish

green,whitish

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green,white

green,greish,yellowish,yellowish or greyish

-
-
green
-
-
-
-
green
-
-
green,yellow
-
-
-
greyish
-
-
-
brown
yellowish
-
black,green
-
-
-
-
-
-
green
-
green,greyish
-
-
-
-
-
orange
-
-

Sheet1

/leaves/blade/apex	/leaves/blade/apex/shape
-	0
-	0
apex acuminate,	124
apex acute or acuminate,	251
apex acute or somewhat acuminate,	124
apex emarginate with some hairs at notch,	0
apex emarginate,	0
-	0
apex acute to acuminate,	250
apex rounded,	6274
apex rounded or emarginate,	6274
apex acuminate,	124
apex acuminate,	124
apex acute or acuminate,	251
apex rounded, obtuse occasionally slightly emarginate to acutish,	4921
apex rounded to emarginate,	6274
apex rounded, obtuse or emarginate,	4921
apex obtuse,	4921
apex acute to obtuse,	326
apex acuminate,	124
apex acuminate,	124
apex acute to obtuse,	326
apex obtuse, rounded or slightly acute,	247
apex emarginate, occasionally with hairs in indentation,	0
apex acutely obtuse,	247
-	0
apex rounded,	6274
apex rounded,	6274
apex obtuse and minutely emarginate with hairs in indentation,	4921
apex obtuse, rounded or emarginate,	4921
apex rounded or somewhat acute,	247
apex acute to obtuse,	326
-	0
apex long-acuminate,	124
apex acuminate,	124
apex acuminate,	124
apex long-acuminate,	124
apex acuminate,	124
apex long-acuminate,	124
apex acute to short-acuminate,	124
apex acute to (long-)acuminate,	124
apex acute,	247
apex abruptly long-acuminate,	124
apex short-acuminate or acute,	128
apex acuminate,	124
apex long-acuminate,	124
apex acute to slightly acuminate,	124
apex acute to acuminate,	250
apex acute,	247
apex acute to acuminate,	250
apex obtuse-acute to acuminate,	250
apex long-acuminate,	124

Sheet1

apex acuminate,	124
apex acuminate or acute,	128
apex acuminate,	124
apex acuminate,	124
apex acute to acuminate,	250
apex (long) acuminate,	124
apex short-acuminate,	124
apex long-acuminate,	124
apex acuminate,	124
apex acute,	247
apex long-acuminate to obtuse,	203
apex acuminate,	124
apex acute to acuminate,	250
apex acuminate,	124
apex acuminate,	124
apex acuminate,	124
apex obtuse or acutish,	4921
apex (long-)acuminate,	124
apex acute to short-acuminate, lower half of blade asymmetrical,	124
apex (long-)acuminate,	124
apex (long-)acuminate,	124
apex acuminate,	124
apex acute to short-acuminate,	124
apex acute to acuminate,	250
apex short-acuminate, maybe somewhat obtuse,	124
apex acute,	247
apex acuminate,	124
apex acuminate,	124
apex acuminate,	124
apex acuminate,	124
apex acuminate,	124
apex acuminate,	124
apex acute or acuminate,	251
apex acuminate,	124
apex long-acuminate,	124
apex long-acuminate,	124
apex (long-)acuminate,	124
apex obtuse, rounded or slightly acute,	247
apex acuminate,	124

Sheet1

/leaves/blade/apex/shape	/leaves/blade/apex/shape	/leaves/blade/apex/hairs
0 -		0
0 -		0
100 acuminate		0
10000000000 acute or acuminate		0
1000000100 acuminate,acute		0
0 -		106
0 -		0
0 -		0
10000 acute to acuminate		0
100000000 rounded		0
100000000 rounded		0
100 acuminate		0
100 acuminate		0
10000000000 acute or acuminate		0
100100000 obtuse,rounded		0
100000000 rounded		0
100100000 obtuse,rounded		0
100000 obtuse		0
10 acute to obtuse		0
100 acuminate		0
100 acuminate		0
10 acute to obtuse		0
1101100000 acute,ob,obtuse,rounded		0
0 -		106
1001100000 acute,ob,obtuse		0
0 -		0
100000000 rounded		0
100000000 rounded		0
100000 obtuse		106
100100000 obtuse,rounded		0
1100000000 acute,rounded		0
10 acute to obtuse		0
0 -		0
100 acuminate		0
100 acuminate		0
100 acuminate		0
100 acuminate		0
100 acuminate		0
100 acuminate		0
1000000100 acuminate,acute		0
1000000100 acuminate,acute		0
1000000000 acute		0
100 acuminate		0
100000000 acuminate or acute		0
100 acuminate		0
100 acuminate		0
1000000100 acuminate,acute		0
10000 acute to acuminate		0
1000000000 acute		0
10000 acute to acuminate		0
1110000 acute to acuminate,ob,obtuse		0
100 acuminate		0

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100 acuminate	0
100000000 acuminate or acute	0
100 acuminate	0
100 acuminate	0
10000 acute to acuminate	0
100 acuminate	0
100 acuminate	0
100 acuminate	0
100 acuminate	0
10000000000 acute	0
1000 acuminate to obtuse	0
100 acuminate	0
10000 acute to acuminate	0
100 acuminate	0
100 acuminate	0
100 acuminate	0
100000 obtuse	0
100 acuminate	0
1000000101 acuminate,acute,asymmetrical	0
100 acuminate	0
100 acuminate	0
100 acuminate	0
1000000100 acuminate,acute	0
10000 acute to acuminate	0
1100100 acuminate,ob,obtuse	0
10000000000 acute	0
100 acuminate	0
100 acuminate	0
100 acuminate	0
100 acuminate	0
100 acuminate	0
100 acuminate	0
100000000000 acute or acuminate	0
100 acuminate	0
100 acuminate	0
100 acuminate	0
100 acuminate	0
1101100000 acute,ob,obtuse,rounded	0
100 acuminate	0

/leaves/blade/apex/hairs /leaves/blade/apex/hairs

0-

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1 hairs

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Sheet1

[illegible]

/leaves/blade/base

-
-

base acute, glabrous;

base acutish to cuneate, glabrous;

base acute, pubescent usually on both sides;

base rounded or subtruncate, glabrous above, minutely hirtellous at base below;

base rounded or truncate, glabrous or with a few hairs;

base acutish, glabrous;

base acute to acuminate, sometimes subobtuse, glabrous;

base rounded, pilose with erect trichomes on upper surface;

base cuneate;

base rounded, minutely pubescent, glabrescent;

base acute, decurrent into petiole, glabrous;

base rounded or cordulate or acutish, glabrous or slightly pubescent, a waxy exudate like small scales or stars is usually present;

base cuneately decurrent into petiole, sometimes abruptly contracted, glabrous;

base acute, glabrous or loosely villous on upper surface, glabrescent, glabrous below;

base cuneate, glabrous;

base acute to obtuse, sparsely to densely villous above, less so beneath, or glabrescent;

base rounded, cordulate or truncate;

base cuneate;

base rounded to cordulate, minutely ciliate towards apex;

base acute or obtuse, glabrous or slightly hirtellous, green above, often magenta-red below;

base acute to rounded, dark green above, with paler veins beneath, minutely puberulent above, sparsely so and glabrescent below;

base acute;

base cordate, cordulate or rounded, brown appressed-pilose above, below light green (Tillet), red with green (Persaud) or magenta-red below;

-

base rounded, glabrous to puberulent;

base rounded, some hairs on young leaves only;

base acutish to obtuse, glabrous and ciliate, sometimes sparsely pilose;

base obtuse to subacute, somewhat ciliate towards apex and sparsely puberulent to glabrous;

base rounded to cordulate;

base truncate to subcordate, occasionally obtuse, pubescent or villous on both sides, glabrescent;

-

base unequally attached to petiole difference |, acute or obtusish, glabrous or pubescent above, (densely) crisp-pubescent below;

base unequally attached to petiole |, rounded to subcordate, sparsely pubescent at least on veins above or glabrescent, glabrous below;

base equally attached to petiole, acute, cuneate or obtuse, may be truncate or subcordate on sterile branches;

base equally attached to petiole, acute;

base equally attached to petiole, acute to subcordate, glabrous or pubescent on veins below;

base equal or almost equally attached to petiole, acute, glabrous;

base equal or almost equally attached to petiole, cuneate or acute, glabrous;

base unequally attached to petiole difference |, longest side obtuse, rounded to cordulate, in narrow leaves acute, shorter side obtuse;

base almost equal to unequally attached to petiole, acute or obtuse, occasionally truncate;

base equal or almost equally attached to petiole, acute, glabrous;

base unequally attached to petiole difference |, rounded, obtuse or subacute, glabrous or sparsely short-pubescent above, glabrous below;

base equal or almost equally attached to petiole, acute, glabrous;

base equal, acute, glabrous above, glabrescent or glabrous below;

base unequally attached to petiole difference |, narrowing to lobed base, lobes shorter than petiole, unequal, longer one subcordate;

base equal or unequally attached to petiole difference |, subcordate or obtuse, shorter side cuneate, pilose above, more densely pubescent below;

base equal or almost equally attached to petiole, deeply unequally lobed, glabrous or sparsely pubescent above, veins glabrous below;

base equal or somewhat unequally attached to petiole difference |, acute or obtuse or rounded or subcordate, glabrous or pubescent above, glabrous below;

base equal or almost equally attached to petiole, rounded to subcordate, glabrous above, crisp-pubescent below especially on veins;

base equal or almost equally attached to petiole, truncate, rounded or cordulate, glabrous above or primary vein somewhat pubescent below;

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base equal or almost equally attached to petiole, truncate or cuneate, but acute to petiole, glabrous above, veins more or
base equal or almost equally attached to petiole, subcordate to rounded, somewhat pilose above, more so below;
base unequally attached to petiole difference |, unequally cordate, with slightly larger, auriculate lobe mostly covering petiole
base unequally attached to petiole difference |, unequally cordate, rounded or obtusish, upper surface glabrous to pubescent
base almost equal, obtuse or acute, glabrous;
base equal or unequally attached to petiole difference |, rounded or cordulate, one side may be subacute, glabrous above
base equal or almost equally attached to petiole, acute, truncate to subcordate, sparsely villous above, more densely so below
base almost equal, acute, glabrous;
base equal or unequally attached to petiole difference |, acute, glabrous;
base almost equally attached to petiole, unequally obtuse or acute, glabrous except for veins crisp-pubescent below;
base equal or almost equally attached to petiole, unequally cordate, lepidote-scabrid above, lower surface and veins hirsute
base equal or unequally attached to petiole difference
base equal, obtuse, truncate, rounded or subacute, glabrous except sparsely minutely pubescent veins above, minutely ciliate
base unequally attached to petiole difference |, rounded to subcordate, pilose above and below;
base unequally attached to petiole difference |, obliquely rounded or cuneate with one side occasionally cordulate, lepidote
base unequally attached to petiole difference |, obtuse, rounded to subcordate, sometimes acute, glabrous above, below ciliate
base unequally attached to petiole difference |, obliquely rounded, glabrous above, veins brown-villous below;
base unequally attached to petiole difference |, unequally cordate or obtuse, glabrescent but veins may be recurved-pubescent
base unequally attached to petiole difference |: shorter side obtuse to abruptly acute, longer side abruptly rounded, obtuse
base equal or unequally attached to petiole difference |, acute, cuneate or obtusish, glabrous above, glabrous often minutely
base equal or almost equally attached to petiole, deeply cordate, glabrescent or veins puberulent;
base equal or almost equally attached to petiole, acute or cuneate or obtusish, occasionally rough above (from scale-like hairs)
base equal or almost equally attached to petiole, subacute to obtusish, glabrous;
base unequally attached to petiole difference |, unequally lobed, basal lobes shorter or longer than petiole, occasionally ovate
base equal or unequally attached to petiole difference at most |, cuneate to obtusish, rounded or subcordate, glabrous but
base nearly rounded to usually deeply cordate, glabrous except for short hairs on veins;
base equal or unequally attached to petiole difference |, obtuse to rounded, glabrous, but veins sparsely to densely appressed
base unequally attached to petiole difference |, acute, glabrous;
base equal or almost equally attached to petiole, subacute to obtuse or rounded, glabrous;
base equal, rounded to subcordate to deeply cordate, glabrous but veins glabrous or sparsely pubescent below;
base unequally attached to petiole difference |, obtuse to subcordate, almost glabrous above, veins may be somewhat appressed
base equal or unequally attached to petiole difference |, subcordate or obtusish, pubescent on both surfaces, veins more or less
base equal, obtuse or rounded;
base almost equal, acute to cuneate, glabrous;
base equal or almost equally attached to petiole, acute, glabrous;
base equal, obtuse or subacute, densely villous below;
base equal or unequally attached to petiole difference |, obtuse to rounded to subcordate occasionally cuneate, glabrous or
base unequally attached to petiole difference |, shorter side acute to obtuse, longer side rounded or cordate, glabrous or glabrescent
base equal or almost equally attached to petiole, acute or cuneate, glabrous above, erect-pubescent below, more so on veins

/leaves/blade/base/shape

-

-

acute

cuneate

acute

rounded,truncate

rounded or truncate

-

acute to acuminate,ob,obtuse

rounded

cuneate

rounded

acute,decurrent

rounded

cuneate,decurrent

acute

cuneate

acute to obtuse

rounded,truncate

cuneate

rounded

acute or obtuse

acute to rounded

acute

cordate,rounded

-

rounded

rounded

obtuse

obtuse to subacute

rounded

ob,obtuse,truncate

-

acute or ob

rounded to subcordate

acute,subcordate,cuneate,cuneate or ob,obtuse,truncate,truncate or subcordate

acute

acute to subcordate

acute

cuneate or acute

acute to obtuse,rounded

acute or obtuse,truncate

acute

obtuse or subacute,rounded

acute

acute

ob,subreniform

subcordate or obtuse

ob

acute or obtuse,obtuse or rounded,rounded or subcordate

rounded to subcordate

rounded,truncate

acute,cuneate,truncate,truncate or cuneate
subcordate to rounded
auriculate,cordate,ob
cordate,ob,rounded,rounded or ob
obtuse or acute
subacute,rounded
acute,subcordate,truncate,truncate to subcordate
acute
acute
obtuse or acute
cordate
-
ob,obtuse,rounded,truncate
rounded to subcordate
ob,oblique,rounded
acute,subcordate,ob,obtuse,rounded,rounded to subcordate
oblique,rounded
cordate or obtuse
acute,cordate,ob,obtuse,obtuse or cordate,rounded
acute,cuneate,cuneate or ob
cordate
acute or cuneate,cuneate or ob
subacute to ob
ob
cuneate,cuneate to ob,rounded
cordate,rounded
obtuse to rounded
acute
subacute to obtuse,obtuse or rounded
rounded to subcordate
obtuse to subcordate
subcordate or ob
obtuse or rounded
acute to cuneate
acute
obtuse or subacute
cuneate,ob,obtuse,obtuse to rounded
acute to obtuse,rounded,rounded or cordate
acute or cuneate

Sheet1

/leaves/blade/base/hairs	/leaves/blade/base/hairs	/leaves/blade/base/hairs
0	0 -	
0	0 -	
71	1000000000 glabrous	
71	1000000000 glabrous	
386	10 pubescent	
71	10001000000000 glabrous,hirtellous	
71	10010000000000 glabrous,hairs	
71	1000000000 glabrous	
71	1000000000 glabrous	
316	100000100000 pilose,trichomes	
0	0 -	
71	100000000000000000 glabrescent,pubescent	
71	1000000000 glabrous	
71	1000000010 glabrous,pubescent	
71	1000000000 glabrous	
71	1000010000 glabrous,villous	
71	1000000000 glabrous	
71	10000000000010000 glabrescent,villous	
0	0 -	
0	0 -	
1	100000000 ciliate	
71	10001000000000 glabrous,hirtellous	
71	10000000000001000 glabrescent,puberulent	
0	0 -	
106	1000000100000 hairs,pilose	
0	0 -	
90	100000000000000000 glabrous to puberulent	
106	10000000000000 hairs	
1	1100100000 ciliate,glabrous,pilose	
1	100000001100001000 ciliate,glabrous,puberulent,puberulent to glabrous	
0	0 -	
71	101000000000000000 glabrescent,pubescent,pubescent or villous	
0	0 -	
93	10001000000000000000 glabrous or pubescent,pubescent or villous	
392	10000000000 pubescent or glabrescent	
0	0 -	
0	0 -	
93	10000000000000000000 glabrous or pubescent	
71	1000000000 glabrous	
71	1000000000 glabrous	
71	1000000010 glabrous,pubescent	
0	0 -	
71	1000000000 glabrous	
71	1000000010 glabrous,pubescent	
71	1000000000 glabrous	
71	1000000000 glabrous	
71	1001000000010 glabrous,hairs,pubescent	
316	100000 pilose	
71	1000000010 glabrous,pubescent	
71	1000000000 glabrous	
71	1000000010 glabrous,pubescent	
71	1000000010 glabrous,pubescent	

Sheet1

71	1000000010	glabrous,pubescent
316	100000	pilose
71	1000000010	glabrous,pubescent
92	100	glabrous to pubescent
71	1000000000	glabrous
71	1001000000	glabrous,hirsute
596	10000	villous
71	1000000000	glabrous
71	1000000000	glabrous
71	1000000010	glabrous,pubescent
141	11000000	hirsute,lepidote
0	0 -	
71	1000000010	glabrous,pubescent
316	100000	pilose
141	11000000	hirsute,lepidote
71	1000000001	glabrous,appressed pubescent
71	1000010000	glabrous,villous
71	10000000000000000000	glabrescent,pubescent
71	1000000010	glabrous,pubescent
71	1000000010	glabrous,pubescent
71	100000000000000001000	glabrescent,puberulent
71	1000000000	glabrous
71	1000000000	glabrous
71	1000000010	glabrous,pubescent
71	1000000010	glabrous,pubescent
71	1001000000000	glabrous,hairs
71	1000000010	glabrous,pubescent
71	1000000000	glabrous
71	1000000000	glabrous
71	1000000010	glabrous,pubescent
71	1000000010	glabrous,pubescent
386	10	pubescent
0	0 -	
71	1000000000	glabrous
71	1000000000	glabrous
596	10000	villous
71	1000000010	glabrous,pubescent
71	1000000010	glabrous,pubescent
71	1000000010	glabrous,pubescent

Sheet1

/leaves/blade/base/growth form /leaves/blade/base/growth form /leaves/blade/base/growth form

[illegible]

Sheet1

0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
127	10 recurved
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
43	1 erect

Sheet1

[illegible]

Sheet1

0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
285	10000 brown
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
285	10000 brown
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -

Sheet1

-	-	
-	-	
0.1-0.4 cm	-	
0.3-0.4 cm	-	
-	-	
0-0.5 cm	-	
-	-	
-	-	
0.2 cm	-	0.2
-	-	
-	-	
0.2 cm	-	0.2
-	-	
0-0.8 cm	-	
0.2-0.6 cm	-	
0-0.7 cm	-	
0.2-0.5 cm	-	
0.1-0.7 cm	-	
0-0.5 cm	-	
up to 0.5 cm	-	
-	-	
-	-	
-	-	
up to 1 cm	-	
0.1 cm	-	0.1
-	-	
0-0.3 cm	-	
0.2-0.3 cm	-	
-	-	
-	-	
0.1-0.3 cm	-	
0-0.3 cm	-	
-	-	
-	-	
-	-	
-	-	
0-0.5 cm	-	
0.2-0.7 cm	-	
-	-	

Sheet1

[illegible]

Sheet1

-	-	
-	-	
	0.1	0.4
	0.3	0.4
-	-	
	0	0.5
-	-	
-	-	
-	-	
-	-	
-	-	
-	-	
	0	0.8
	0.2	0.6
	0	0.7
	0.2	0.5
	0.1	0.7
	0	0.5
		0.5
-	-	
-	-	
-	-	
-	-	
-	-	1
-	-	
-	-	
	0	0.3
	0.2	0.3
-	-	
-	-	
	0.1	0.3
	0	0.3
-	-	
-	-	
-	-	
-	-	
	0	0.5
	0.2	0.7
-	-	

Sheet1

/leaves/blade/dimensions	/leaves/blade/dimensions/length
-	-
-	-
4.5-13 x 2-5 cm	4.5-13
2-6 x 1-3 cm	2-6
2-8 x 0.8-4 cm	2-8
0.5-0.8 x 0.5-1 cm	0.5-0.8
-	-
0.5-3.0 x 0.2-0.6 cm	0.5-3.0
1.5-8 x 0.5-3.5 cm	1.5-8
1-4.5 x 1-3.5 cm	1-4.5
4.5 x 3-4 cm	4.5
4.5-8 x 3-5.5 cm	4.5-8
(3.5-)7-17 x (0.7-)1-3 cm	7-17
4-11 x 1.5-6 cm	4-11
4.5-14 x 2.5-6 cm	4.5-14
1-3.5 x 0.6-2.3 cm	1-3.5
4-14.5 x 2.5-6.5 cm	4-14.5
0.5-2 x 0.3-0.9 cm	0.5-2
1-3.7 x 1-3.5 cm	1-3.7
15-30 x 4-12 cm	15-30
to 12 x 7 cm	12
1-3.5 x 0.8-2.3 cm	1-3.5
1-4.5 x 0.8-2.2 cm	1-4.5
0.6-1.8 x 0.4-1.0 cm	0.6-1.8
0.8-2.5 x 0.8-2.5 cm	0.8-2.5
1.3-1.5 x 0.4-1 cm	1.3-1.5
(0.5-)1-1.2 x (0.5-)1-1.2 cm	1-1.2
1-2 x 1-2 cm	1-2
0.6-1.5 x 0.2-1.4 cm	0.6-1.5
0.6-1.2 x 0.4-1.0 cm	0.6-1.2
2-7 x 1.5-6.5 cm	2-7
2-3 x 2.7-7 cm	2-3
-	-
8-16.5 x 3-6 cm	8-16.5
12-24 x 3-8 cm	12-24
12-23 x 3.5-9 cm	12-23
20-31 x 6-12 cm	20-31
8-11 x 2.5-6 cm	8-11
5-11 x 1-2.8 cm	5-11
8-16 x 2-4.7 cm	8-16
10-25 x 6-11 cm	10-25
15-35 x (6-)9-15 cm	15-35
13-16.5 x (3.5-)4-6.5 cm	13-16.5
7-18 x 3-7.5 cm	7-18
13-30 x 5-8 cm	13-30
7-10.5 x 0.7-1.5 cm	7-10.5
9.5-16 x 3.5-7.2 cm	9.5-16
(7-)11-21 x (3-)4-11 cm	11-21
23-60 x 14-28 cm	23-60
13-22 x 6-11 cm	13-22
3.5-7 x 1-2 cm	3.5-7
11-24 x 6-13 cm	11-24

Sheet1

13-20 x 5-13 cm	13-20
9-20 x 4-6 cm	9-20
11-26 x 4-9 cm	11-26
15-20 x 7-9 cm	15-20
10-20 x 3-8 cm	10-20
13-21 x 7.5-10 cm	13-21
18-22 x 5.5-7.5 cm	18-22
6-16 x 1.5-3 cm	6-16
10-14 x 3-4.5 cm	10-14
8-13 x 3.5-5.5 cm	8-13
5-12 x 2.5-6.5 cm	5-12
14-28 x 7-14 cm	14-28
5-8 x 1.5-3.5 cm	5-8
16-25 x 6-9.5 cm	16-25
11-23 x 4-11 cm	11-23
10-25 x 2.5-13 cm	10-25
9-15 x 5-7 cm	9-15
4-17 x 3-6.5 cm, (on young creeping branches ca. 1.5-5 x 0.8-1.8 cm	4-17
20-24 x 7.5-9.5 cm	20-24
13-23 x 4-8.5 cm	13-23
10-12 x 8-15 cm	10-12
8-15 x 3-6 cm	8-15
8-19 x 5-10 cm	8-19
20-60 x (12-)20-35 cm	20-60
7-17 x 2.5-6 cm	7-17
to 16-30 x 18-40 cm	16-30
16-27 x 7-13 cm	16-27
9-16 x 2.5-7 cm	9-16
(5.5-)7.5-17 x (2.5-)3.5-6.5 cm	7.5-17
7-12 x 3-5 cm	7-12
11-25 x 4.5-8 cm	11-25
17-30 x 10-17 cm	17-30
14-30 x 7-18 cm	14-30
9-13 x 2-4 cm	9-13
14-20 x 5-7 cm	14-20
5-7.5 x 1-1.5 cm	5-7.5
12-33 x 5-13 cm	12-33
4-12 x 2-6 cm	4-12
12-15 x 3.5-5 cm	12-15

Sheet1

/leaves/blade/dimensions/length	/leaves/blade/dimensions/length/minimum
-	-
-	-
-	4.5
-	2
-	2
-	0.5
-	-
-	0.5
-	1.5
-	1
4.5 -	
-	4.5
-	7
-	4
-	4.5
-	1
-	4
-	0.5
-	1
-	15
12 -	
-	1
-	1
-	0.6
-	0.8
-	1.3
-	1
-	1
-	0.6
-	0.6
-	2
-	2
-	-
-	8
-	12
-	12
-	20
-	8
-	5
-	8
-	10
-	15
-	13
-	7
-	13
-	7
-	9.5
-	11
-	23
-	13
-	3.5
-	11

Sheet1

-	13
-	9
-	11
-	15
-	10
-	13
-	18
-	6
-	10
-	8
-	5
-	14
-	5
-	16
-	11
-	10
-	9
-	4
-	20
-	13
-	10
-	8
-	8
-	20
-	7
-	16
-	16
-	9
-	7.5
-	7
-	11
-	17
-	14
-	9
-	14
-	5
-	12
-	4
-	12

Sheet1

/leaves/blade/dimensions/length/maximum /leaves/blade/dimensions/width

-	-	
-	-	
	13 2-5	
	6 1-3	
	8 0.8-4	
	0.8 0.5-1	
-	-	
	3 0.2-0.6	
	8 0.5-3.5	
	4.5 1-3.5	
-	3-4	
	8 3-5.5	
	17 (0.7-)1-3	
	11 1.5-6	
	14 2.5-6	
	3.5 0.6-2.3	
14.5	2.5-6.5	
	2 0.3-0.9	
	3.7 1-3.5	
	30 4-12	
-		7
	3.5 0.8-2.3	
	4.5 0.8-2.2	
	1.8 0.4-1.0	
	2.5 0.8-2.5	
	1.5 0.4-1	
	1.2 (0.5-)1-1.2	
	2 1-2	
	1.5 0.2-1.4	
	1.2 0.4-1.0	
	7 1.5-6.5	
	3 2.7-7	
-	-	
	16.5 3-6	
	24 3-8	
	23 3.5-9	
	31 6-12	
	11 2.5-6	
	11 1-2.8	
	16 2-4.7	
	25 6-11	
	35 (6-)9-15	
16.5	(3.5-)4-6.5	
	18 3-7.5	
	30 5-8	
10.5	0.7-1.5	
	16 3.5-7.2	
	21 (3-)4-11	
	60 14-28	
	22 6-11	
	7 1-2	
	24 6-13	

Sheet1

20 5-13
20 4-6
26 4-9
20 7-9
20 3-8
21 7.5-10
22 5.5-7.5
16 1.5-3
14 3-4.5
13 3.5-5.5
12 2.5-6.5
28 7-14
8 1.5-3.5
25 6-9.5
23 4-11
25 2.5-13
15 5-7
17 3-6.5
24 7.5-9.5
23 4-8.5
12 8-15
15 3-6
19 5-10
60 (12-)20-35
17 2.5-6
30 18-40
27 7-13
16 2.5-7
17 (2.5-)3.5-6.5
12 3-5
25 4.5-8
30 10-17
30 7-18
13 2-4
20 5-7
7.5 1-1.5
33 5-13
12 2-6
15 3.5-5

Sheet1

/leaves/blade/dimensions/width	/leaves/blade/dimensions/width/minimum
-	-
-	-
-	2
-	1
-	0.8
-	0.5
-	-
-	0.2
-	0.5
-	1
-	3
-	3
-	1
-	1.5
-	2.5
-	0.6
-	2.5
-	0.3
-	1
-	4
-	7 -
-	0.8
-	0.8
-	0.4
-	0.8
-	0.4
-	1
-	1
-	0.2
-	0.4
-	1.5
-	2.7
-	-
-	3
-	3
-	3.5
-	6
-	2.5
-	1
-	2
-	6
-	9
-	4
-	3
-	5
-	0.7
-	3.5
-	4
-	14
-	6
-	1
-	6

Sheet1

-	5
-	4
-	4
-	7
-	3
-	7.5
-	5.5
-	1.5
-	3
-	3.5
-	2.5
-	7
-	1.5
-	6
-	4
-	2.5
-	5
-	3
-	7.5
-	4
-	8
-	3
-	5
-	20
-	2.5
-	18
-	7
-	2.5
-	3.5
-	3
-	4.5
-	10
-	7
-	2
-	5
-	1
-	5
-	2
-	3.5

Sheet1

/leaves/blade/dimensions/width/maximum	/leaves/blade/dimensions/growth form
-	0
-	0
5	0
3	0
4	0
1	0
-	0
0.6	0
3.5	0
3.5	0
4	0
5.5	0
3	0
6	0
6	0
2.3	0
6.5	0
0.9	0
3.5	0
12	0
-	0
2.3	0
2.2	0
1	0
2.5	0
1	0
1.2	0
2	0
1.4	0
1	0
6.5	0
7	0
-	0
6	0
8	0
9	0
12	0
6	0
2.8	0
4.7	0
11	0
15	0
6.5	0
7.5	0
8	0
1.5	0
7.2	0
11	0
28	0
11	0
2	0
13	0

Sheet1

13	0
6	0
9	0
9	0
8	0
10	0
7.5	0
3	0
4.5	0
5.5	0
6.5	0
14	0
3.5	0
9.5	0
11	0
13	0
7	0
6.5	22
9.5	0
8.5	0
15	0
6	0
10	0
35	0
6	0
40	0
13	0
7	0
6.5	0
5	0
8	0
17	0
18	0
4	0
7	0
1.5	0
13	0
6	0
5	0

Sheet1

/leaves/blade/dimensions/growth form /leaves/blade/dimensions/growth form

[illegible]

Sheet1

0 -

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/leaves/blade/margins

-

-

margin may be ciliate towards apex,

-

margin ciliate,

margin not ciliate,

margin somewhat ciliate,

-

margin ciliate near apex,

-

-

margin somewhat ciliate,

-

-

-

margin not ciliate,

-

margin ciliate,

-

-

-

-

margin ciliate,

-

margin ciliate,

margin ciliolate at apex, obtuse at apex, narrowly acute at base, glabrous above, sparsely minutely pubescent below;

margin ciliate,

-

-

-

-

margin ciliolate towards apex,

-

margin ciliate,

-

-

-

-

-

-

margin protracted beyond base of blade forming a ligule-like structure to 4 mm long

margin ciliate,

-

margin ciliate,

-

-

-

margin ciliate,

-

margin ciliate,

-

-

-
margin hardly ciliate,
-
-
-
-
-
-
margin not ciliate,
-
-
-
margin ciliate towards apex,
margin long-ciliate,
-
margin not ciliate,
-
margin occasionally ciliate,
-
-
margin ciliate,
-
-
-
-
-
margin ciliate, |margin enlarged;
-
-
-
-
-
-
-
margin ciliate,
-
-
-

Sheet1

[illegible]

Sheet1

/leaves/blade/margins/shape /leaves/blade/margins/shape /leaves/blade/margins/shape

[illegible]

Sheet1

[illegible]

Sheet1

/leaves/blade/margins/hairs	/leaves/blade/margins/hairs	/leaves/blade/margins/hairs
0	0 -	
0	0 -	
1	1000 ciliate	
0	0 -	
1	1000 ciliate	
1	1000 ciliate	
1	1000 ciliate	
0	0 -	
1	1000 ciliate	
0	0 -	
0	0 -	
1	1000 ciliate	
0	0 -	
0	0 -	
0	0 -	
1	1000 ciliate	
0	0 -	
1	1000 ciliate	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
1	1000 ciliate	
0	0 -	
1	1000 ciliate	
1	111 ciliolate,glabrous,pubescent	
1	1000 ciliate	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
1	10 ciliolate	
0	0 -	
1	1000 ciliate	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
0	0 -	
1	1000 ciliate	
0	0 -	
1	1000 ciliate	
0	0 -	
0	0 -	
0	0 -	
1	1000 ciliate	
0	0 -	
1	1000 ciliate	
0	0 -	
0	0 -	

Sheet1

0	0 -
1	1000 ciliate
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
1	1000 ciliate
0	0 -
0	0 -
0	0 -
1	1000 ciliate
1	1000 ciliate
0	0 -
1	1000 ciliate
0	0 -
1	1000 ciliate
0	0 -
0	0 -
1	1000 ciliate
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
1	10 ciliolate
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
0	0 -
1	1000 ciliate
0	0 -
0	0 -
0	0 -

/leaves/blade/shape

[illegible]

5167

0

0

5905

5905

0

0

0

0

0

5167

0

0

0

0

0

0

0

0

0

6359

0

0

0

0

0

0

0

0

4881

0

0

0

0

0

0

0

0

0

/leaves/blade/shape

-

-

elliptic or broadly elliptic or ovate

rhombic to elliptic or oblanceolate

elliptic, narrowly elliptic, or obovate, often rhombic

oblately suborbicular

orbicular or subreniform

narrowly spatulate, narrowly elliptic or narrowly oblanceolate, larger towards apex of stem

narrowly ovate or ovate

broadly elliptic to orbicular

elliptic to obovate (to broadly ovate in extra-Guianan specimens)

narrowly ovate, ovate or almost orbicular

narrowly elliptic or narrowly oblanceolate

narrowly elliptic to ovate

obovate or elliptic, sometimes even broadly elliptic

obovate or somewhat elliptic

elliptic, obovate or subspathulate

oblong-elliptic or oblong-obovate or almost orbicular

broadly elliptic to deltoid

narrowly elliptic or oblanceolate

ovate

elliptic, subobovate or broadly ovate

broadly elliptic, obovate or orbicular

subspathulate, or elliptic-, or oblong-obovate

broadly ovate to deltoid

subrhombic, elliptic or narrowly elliptic

broadly elliptic to elliptic or almost orbicular

broadly elliptic or deltoid

elliptic or ovate

rhombic, ovate-elliptic to suborbicular

ovate with acutish apex or broadly ovate to almost orbicular

deltoid, ovate to broadly ovate

-

lance-elliptic or elliptic-ovate

lanceolate or lanceolate-oblong or elliptic-ovate

lanceolate to lance-elliptic or elliptic-ovate, broadly ovate on sterile branches, often asymmetrical: with one side wider in the elliptic

lanceolate to rounded or subobovate

narrowly lanceolate

lanceolate to oblong to elliptic or ovate, 3-4 x longer than wide

oblong-ovate, (narrowly) ovate or (narrowly) elliptic

elliptic-ovate to oblong-elliptic

oblong or elliptic-oblong

lance-elliptic or lanceolate-oblong or oblanceolate

elliptic-oblong

narrowly lanceolate

(narrowly) elliptic to subobovate

elliptic, lanceolate-oblong or ovate

broadly ovate to elliptic-ovate

elliptic-ovate to broadly ovate

narrowly elliptic or lanceolate-oblong

broadly ovate to ovate, or even suborbiculate

ovate
elliptic-ovate, elliptic-oblong or lanceolate
elliptic to oblanceolate
rhombic, elliptic to subobovate
rhombic, somewhat asymmetric
slightly asymmetrical, broadly elliptic
lance-elliptic to ovate to broadly ovate
narrowly lanceolate
elliptic(-oblong)
elliptic
ovate
elliptic to ovate
narrowly ovate to ovate
obovate to elliptic or elliptic-oblong
elliptic or elliptic-ovate
broadly elliptic or broadly to narrowly ovate
elliptic to broadly elliptic
elliptic
elliptic-oblong or somewhat ovate
elliptic, ovate, elliptic-oblong or rhombic
rounded to ovate
(narrowly) ovate to elliptic-oblong
elliptic, ovate to broadly ovate
elliptic-ovate to oblong
lance-elliptic, elliptic or elliptic-oblong
round-ovate
narrowly elliptic to elliptic-ovate
elliptic to ovate
elliptic-oblong to narrowly ovate
oblong to ovate
ovate or elliptic-ovate
broadly ovate or ovate
ovate or broadly ovate
narrowly ovate or lance-elliptic
narrowly elliptic or narrowly elliptic-oblong
narrowly elliptic or narrowly ovate
(narrowly) elliptic, elliptic-oblong or (narrowly) ovate
broadly ovate-elliptic
lance-elliptic to oblanceolate

Sheet1

/leaves/blade/shape/minimum	/leaves/blade/shape/maximum	/leaves/blade/shape/shape
-	-	0
-	-	0
-	-	5167
-	-	4306
-	-	4306
-	-	4306
-	-	5142
-	-	4306
-	-	5167
-	-	5044
-	-	4306
-	-	5044
-	-	4306
-	-	5167
-	-	4306
-	-	4306
-	-	4306
-	-	4798
-	-	2830
-	-	4306
-	-	5167
-	-	4306
-	-	4306
-	-	4798
-	-	5214
-	-	5905
-	-	5044
-	-	2830
-	-	5167
-	-	5044
-	-	5044
-	-	2830
-	-	0
-	-	5167
-	-	4798
-	-	739
-	-	0
-	-	4306
-	-	0
-	3	4798
-	-	4798
-	-	5246
-	-	4798
-	-	4870
-	-	4798
-	-	0
-	-	4306
-	-	4882
-	-	5167
-	-	5167
-	-	4798
-	-	5044

Sheet1

-	-	5167
-	-	4798
-	-	4306
-	-	4306
-	-	5905
-	-	739
-	-	5167
-	-	0
-	-	4798
-	-	0
-	-	5167
-	-	5167
-	-	5167
-	-	4798
-	-	5167
-	-	5167
-	-	0
-	-	0
-	-	4798
-	-	4894
-	-	6359
-	-	4798
-	-	5167
-	-	5246
-	-	4798
-	-	5167
-	-	5167
-	-	5167
-	-	4798
-	-	4881
-	-	5167
-	-	5167
-	-	5167
-	-	5167
-	-	4798
-	-	5167
-	-	4798
-	-	5167
-	-	4306

10000 ovate
 10000000010000 oblong,ovate
 1000 ob
 10011000 ob,ovate,rhombic
 10000000 rhombic
 100000000 asymmetrical
 10000 ovate
 0 -
 10000000000000 oblong
 0 -
 10000 ovate
 10000 ovate
 10000 ovate
 10000000010000 oblong,ovate
 10000 ovate
 10000 ovate
 0 -
 0 -
 10000000010000 oblong,ovate
 1000000000000000 oblong or rhombic
 10000000000 rounded to ovate
 10000000010000 oblong,ovate
 10000 ovate
 100000000000000000 ovate to oblong
 10000000000000 oblong
 10000 ovate
 10000 ovate
 10000 ovate
 10000000010000 oblong,ovate
 1000000000000000000 oblong to ovate
 10000 ovate
 10000 ovate
 10000 ovate
 10000 ovate
 10000000000000 oblong
 10000 ovate
 10000000010000 oblong,ovate
 10000 ovate
 1000 ob

/leaves/blade/texture

-

-

fleshy membranous or coriaceous

fleshy to coriaceous

slightly fleshy

fleshy-membranous

slightly fleshy

fleshy to subcoriaceous

fleshy to membranous

fleshy in vivo, membranous almost transparent when dried

-

coriaceous or subcoriaceous

fleshy and membranous

fleshy-coriaceous or subcoriaceous

fleshy

fleshy coriaceous

coriaceous

-

membranous, often drying translucent

membranous

coriaceous

fleshy-coriaceous

fleshy coriaceous

fleshy-coriaceous

fleshy, coriaceous

coriaceous fleshy

fleshy or fleshy coriaceous

fleshy or slightly coriaceous

fleshy-subcoriaceous

fleshy to subcoriaceous

fleshy, somewhat bullate in vivo, membranous, almost translucent when dried

-

scabrous

-

scabrous

membranous or subcoriaceous

-

-

not scabrous

thin-coriaceous to coriaceous, may be somewhat rugose, not scabrous

-

-

thick chartaceous, not scabrous

-

coriaceous, not scabrous

not scabrous

not scabrous

somewhat scabrous

not scabrous

not scabrous

-

firmly membranous

not scabrous
somewhat scabrous
membranous or subcoriaceous, not scabrous
hardly to densely scabrous above
coriaceous, drying shiny or membranous
not scabrous
may be somewhat bullate in vivo
not scabrous
not scabrous
not scabrous
scabrous
not scabrous
not scabrous
not scabrous
scabrous often on both surfaces
-
not scabrous
-
not scabrous
fleshy, drying membranous
-
-
not scabrous
not scabrous
slightly bullate to smooth, coriaceous and silvery shiny or membranous
-
not scabrous
membranous, not scabrous
subcoriaceous
membranous, bicolourous, not scabrous
somewhat scabrous and bullate
somewhat scabrous when dried
membranous or firmly chartaceous
not scabrous
-
somewhat scabrous above
coriaceous
-
not scabrous

Sheet1

```
/leaves/blade/texture/colour /leaves/blade/texture/colour /leaves/blade/texture/colour
```

[illegible]

Sheet1

[illegible]

/leaves/petiole

-
-

petiole |, deeply grooved or winged;

petiole |, glabrous;

petiole |, pubescent;

petiole |, minutely hirtellous;

petiole |, often red, glabrous or with sparse hairs;

petiole |, minutely pubescent;

petiole |, usually ciliate with 2 rows of hairs;

petiole |, glabrous;

petiole not grooved or winged,

petiole attached |, minutely pubescent, glabrescent;

petiole |, glabrous, narrowly winged;

petiole |, glabrous, ciliate or puberulent, reddish;

petiole |, more or less laterally winged or grooved, glabrous;

petiole |, loosely villous;

petiole green or green with red spots, |, more or less grooved, minutely pubescent;

petiole |, loosely villous;

petiole |, glabrous;

petiole to

petiole

petiole

petiole |, glabrous or minutely pubescent;

petiole

petiole |, retrorsely appressed-pubescent;

petiole |, minutely pubescent;

petiole |, pubescent to glabrous;

petiole |, crisp-pubescent;

petiole |, glabrous or with a few hairs at node;

petiole |, minutely pubescent;

petiole attached

petiole |, crisp-pubescent;

petioles often vaginate or winged, at base only or to apex (base of leaf blade), their margins may extend beyond base of l

Petiole |, vaginate to middle;

petiole |, pubescent, vaginate near base;

Petiole slender, |, vaginate only at base;

Petiole |, vaginate at base;

Petiole slender, |, vaginate up to middle, glabrous or pubescent;

petiole |, vaginate at base, retrorsely pubescent;

Petiole |, canaliculate, ciliate on margin or keel, vaginate at base only;

Petiole glabrous or minutely pubescent, |, deeply vaginate,

Petiole |, vaginate at base;

Petiole |, glabrous, deeply vaginate at base;

Petiole |, vaginate to apex, often conspicuously winged, green or maroon;

Petiole |, glabrous, vaginate near or at base;

Petiole |, glabrous, vaginate to apex;

Petiole |, densely pubescent with long hairs, vaginate at base;

Petiole |, pilose;

Petiole vaginate to apex, |, densely pubescent;

Petiole of lower leaves |, of upper leaves |, glabrous, vaginate or winged to apex;

Petiole |, crisp-pubescent, vaginate near base;

Petiole |, glabrous or sparsely pubescent, vaginate to apex;

Sheet1

Petiole |, glabrous or pubescent, vaginate to middle or to apex;
Petiole |, pilose, glabrescent, vaginate to apex, sometimes reddish tinged;
Petiole |, crisp-pubescent, vaginate to blade;
Petiole |, pubescent sometimes densely so, vaginate to apex, occasionally reddish tinged;
Petiole |, vaginate or grooved to apex;
Petiole |, hirsute, broadly vaginate or winged to apex;
Petiole 0.5-2(to 6 in fertile twigs) cm long, dark-villous (hairs at least
Petiole |, ciliate, vaginate to apex;
Petiole |, glabrous, vaginate below middle;
Petiole |, crisp-pubescent, vaginate to apex;
Petiole |, pubescent, vaginate at base;
Petiole |, vaginate to apex, glabrescent;
Petiole |, sparsely pubescent or glabrescent, vaginate to apex;
Petiole |, long-hirsute, vaginate to apex (or to middle);
Petiole |, hirsute;
petiole |, crisp-pubescent, vaginate to apex;
Petiole |, villous;
Petiole |, pubescent, vaginate to apex;
Petiole |, vaginate and narrowly winged to apex;
Petiole |, vaginate to apex;
Petiole vaginate to apex, |, glabrous;
Petiole |, glabrous, pubescent when young, vaginate at base;
Petiole |, glabrous, vaginate to apex;
Petiole |, glabrous or densely brown-pubescent, green to brown, vaginate or winged to apex;
Petiole |, hirsute, vaginate to middle;
petiole attached at up to 1/3 of blade, rarely near base, |, vaginate or slightly winged in lower part;
Petiole |, glabrous, vaginate to apex,
Petiole |, vaginate to middle or to apex;
Petiole |, vaginate at base;
Petiole |, glabrous or sparsely pubescent, vaginate to apex;
Petiole |, densely brown-pubescent;
Petiole |, densely pubescent;
Petiole |, glabrous, vaginate at base;
Petiole |, vaginate to apex;
Petiole |, glabrous, vaginate usually at base;
Petiole |, villous;
Petiole often stout, |, densely crisp-pubescent, vaginate to apex;
Petiole tuberculate, |, minutely puberulent, glabrescent, vaginate to base of blade and extending shortly;
Petiole |, densely pubescent or hirsute, vaginate at base;

Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

/leaves/petiole/position	/leaves/petiole/hairs	/leaves/petiole/hairs	/leaves/petiole/hairs
-	0	0 -	
-	0	0 -	
-	0	0 -	
-	71	1000000000 glabrous	
-	386	10 pubescent	
-	176	10000000000000 hirtellous	
-	71	1001000000000 glabrous,hairs	
-	386	10 pubescent	
-	1	1000100000000 ciliate,hairs	
-	71	1000000000 glabrous	
-	0	0 -	
-	71	100000000010 glabrescent,pubescent	
-	71	1000000000 glabrous	
-	21	100000 ciliate or puberulent	
lateral	71	1000000000 glabrous	
-	596	10000 villous	
-	386	10 pubescent	
-	596	10000 villous	
-	71	1000000000 glabrous	
-	0	0 -	
-	0	0 -	
-	0	0 -	
-	71	1000000010 glabrous,pubescent	
-	0	0 -	
-	386	10 pubescent	
-	386	10 pubescent	
-	391	100 pubescent to glabrous	
-	386	10 pubescent	
-	71	1001000000000 glabrous,hairs	
-	386	10 pubescent	
-	0	0 -	
-	386	10 pubescent	
-	0	0 -	
-	0	0 -	
-	386	10 pubescent	
-	0	0 -	
-	0	0 -	
-	93	100000000000000 glabrous or pubescent	
-	386	10 pubescent	
-	1	100000000 ciliate	
-	71	1000000010 glabrous,pubescent	
-	0	0 -	
-	71	1000000000 glabrous	
-	0	0 -	
-	71	1000000000 glabrous	
-	71	1000000000 glabrous	
-	106	1000000000010 hairs,pubescent	
-	316	1000000 pilose	
-	386	10 pubescent	
-	71	1000000000 glabrous	
-	386	10 pubescent	
-	71	1000000010 glabrous,pubescent	

Sheet1

/leaves/petiole/colour	/leaves/petiole/colour	/leaves/petiole/colour	/leaves/petiole/length
0	0 -	-	-
0	0 -	-	-
0	0 -	0.3-3 cm long	0.3-3 cm long
0	0 -	0.2-1.5 cm long	0.2-1.5 cm long
0	0 -	0.2-1 cm long	0.2-1 cm long
0	0 -	0.3-0.8 cm long	0.3-0.8 cm long
1705	1 red	0.1-0.5 cm long	0.1-0.5 cm long
0	0 -	to 0.3 cm long	to 0.3 cm long
0	0 -	0.5-1 cm long	0.5-1 cm long
0	0 -	1-5 cm long	1-5 cm long
0	0 -	0.5-1.5 cm long	0.5-1.5 cm long
0	0 -	3-11 cm long	3-11 cm long
0	0 -	0.5-1 cm long	0.5-1 cm long
1705	1000 reddish	0.5-2 cm long	0.5-2 cm long
0	0 -	1-7 cm long	1-7 cm long
0	0 -	0.2-0.6 cm long	0.2-0.6 cm long
782	101 green,red	1-6.5 cm long	1-6.5 cm long
0	0 -	to 0.5 cm long	to 0.5 cm long
0	0 -	to 0.3-2.5 cm long	to 0.3-2.5 cm long
0	0 -	0.25 cm long	0.25 cm long
0	0 -	to 20 cm long	to 20 cm long
0	0 -	0.2-1 cm long	0.2-1 cm long
0	0 -	0.1-0.5 cm long	0.1-0.5 cm long
0	0 -	0.1-0.4 cm long	0.1-0.4 cm long
0	0 -	1-1.5 cm long	1-1.5 cm long
0	0 -	0.1-0.5 cm long	0.1-0.5 cm long
0	0 -	up to 1 cm long	up to 1 cm long
0	0 -	to 2 cm long	to 2 cm long
0	0 -	0.1-0.5 cm long	0.1-0.5 cm long
0	0 -	0.05-0.2 cm long	0.05-0.2 cm long
0	0 -	1.5-6 cm long	1.5-6 cm long
0	0 -	1.5-4.5 cm long	1.5-4.5 cm long
0	0 -	-	-
0	0 -	0.2-0.5 cm long	0.2-0.5 cm long
0	0 -	0.3-0.8 cm long	0.3-0.8 cm long
0	0 -	1-1.5 cm long	1-1.5 cm long
0	0 -	1.2-2.5 cm long	1.2-2.5 cm long
0	0 -	0.5-1 cm long	0.5-1 cm long
0	0 -	0.1-0.4 cm long	0.1-0.4 cm long
0	0 -	0.5-1 cm long	0.5-1 cm long
0	0 -	0.3-2 cm long	0.3-2 cm long
0	0 -	0.5-4 cm long	0.5-4 cm long
0	0 -	0.7-1.3 cm long	0.7-1.3 cm long
818	10 green or maroon	0.3-1.3 cm long	0.3-1.3 cm long
0	0 -	0.5 cm long	0.5 cm long
0	0 -	(0.2-)0.4-0.6 cm long	(0.2-)0.4-0.6 cm long
0	0 -	0.5-1 cm long	0.5-1 cm long
0	0 -	(0.2-)0.3-0.5 cm long	(0.2-)0.3-0.5 cm long
0	0 -	4-9 cm long	4-9 cm long
0	0 -	0-0.3 cm long	0-0.3 cm long
0	0 -	0.2-1.5 cm long	0.2-1.5 cm long
0	0 -	2-3.2 cm long	2-3.2 cm long

Sheet1

0	0 -	ca. 1.5 cm long
1705	1000 reddish	0.2-1 cm long
0	0 -	0.3-0.5 cm long
1705	1000 reddish	0.5-1.5 cm long
0	0 -	1-2.2 cm long
0	0 -	0.5-1.2 cm long
0	0 -	1 mm long
0	0 -	0.3-0.7 cm long
0	0 -	1-2 cm long
0	0 -	0.5 cm long
0	0 -	0-0.4 cm long
0	0 -	1-3.2 cm long
0	0 -	0.7-1.5 cm long
0	0 -	1-3 cm long
0	0 -	0.5-1 cm long
0	0 -	0.5-1 cm long
0	0 -	1-2 cm long
0	0 -	0.5-1 cm long
0	0 -	2.5-4.5 cm long
0	0 -	0.3-2.5 cm long
0	0 -	4 cm long
0	0 -	0.4-0.8 cm long
0	0 -	1-2 cm long
791	10000 green to brown	3-7 cm long
0	0 -	0.5 cm long
0	0 -	8-20 cm long
0	0 -	(0.5-)1-4.5 cm long
0	0 -	0.4-1 cm long
0	0 -	0.5-2 cm long
0	0 -	1.5-2.5 cm long
285	100000 brown	0.3-0.7 cm long
0	0 -	1.5-2 cm long
0	0 -	3-12 cm long
0	0 -	0.3-2 cm long
0	0 -	0.3-0.6 cm long
0	0 -	ca. 0.5 cm long
0	0 -	to 1 cm long
0	0 -	0.1-0.7 cm long
0	0 -	0.3-0.5 cm long

Sheet1

/leaves/petiole/length	/leaves/petiole/length/minimum	/leaves/petiole/length/maximum
-	-	-
-	-	-
-	0.3	3
-	0.2	1.5
-	0.2	1
-	0.3	0.8
-	0.1	0.5
-	-	0.3
-	0.5	1
-	1	5
-	0.5	1.5
-	3	11
-	0.5	1
-	0.5	2
-	1	7
-	0.2	0.6
-	1	6.5
-	-	0.5
-	0.3	0.3-2.5
0.25 -	-	-
-	-	20
-	0.2	1
-	0.1	0.5
-	0.1	0.4
-	1	1.5
-	0.1	0.5
-	-	1
-	-	2
-	0.1	0.5
-	0.05	0.2
-	1.5	6
-	1.5	4.5
-	-	-
-	0.2	0.5
-	0.3	0.8
-	1	1.5
-	1.2	2.5
-	0.5	1
-	0.1	0.4
-	0.5	1
-	0.3	2
-	0.5	4
-	0.7	1.3
-	0.3	1.3
0.5 -	-	-
-	0.4	0.6
-	0.5	1
-	0.3	0.5
-	4	9
-	0	0.3
-	0.2	1.5
-	2	3.2

Sheet1

	1.5 -	-	
-		0.2	1
-		0.3	0.5
-		0.5	1.5
-		1	2.2
-		0.5	1.2
	1 -	-	
-		0.3	0.7
-		1	2
	0.5 -	-	
-		0	0.4
-		1	3.2
-		0.7	1.5
-		1	3
-		0.5	1
-		0.5	1
-		1	2
-		0.5	1
-		2.5	4.5
-		0.3	2.5
	4 -	-	
-		0.4	0.8
-		1	2
-		3	7
	0.5 -	-	
-		8	20
-		1	4.5
-		0.4	1
-		0.5	2
-		1.5	2.5
-		0.3	0.7
-		1.5	2
-		3	12
-		0.3	2
-		0.3	0.6
	0.5 -	-	
-	-		1
-		0.1	0.7
-		0.3	0.5

/leaves/veins

-

pinnately or palmately veined.

3-5-plexi- or palmately veined.

palmately 3-veined.

palmately 3-veined.

palmately 3-5-veined.

obsoletely palmately 3-veined.

venation slightly obvious, palmately 3-veined.

venation obvious, pli- or palmately 3-5-veined.

venation obvious in dried state, veins 6-8 from base.

pinnately veined veins branching off in lower part of primary vein, may be obsolete when dried.

veins 9-11 arising from base.

pinnately 7-11-veined.

venation obsolete, 7-9-plexi-veined.

venation obvious, ca. 7-plexi-veined, or a few veins branching off primary vein or obsolete when dried.

veins 3, obvious.

venation obvious or hardly visible, ca, 7-plexi-veined, or few veins branching off primary vein.

venation obvious, palmately 3-veined.

palmately 5-7-veined.

venation pinnate with 4-5 lateral pairs of veins.

somewhat pli-veined with 2 pairs at base and 2-3 pairs from primary vein.

veins 3, obvious, often red below.

palmately 3-veined, veins impressed above, prominent beneath.

palmately 3-veined.

venation obvious in dried state, obsoletely palmately 5-7-veined.

distinctly palmately 3-veined.

obsolete palmately 3-veined.

venation obsoletely 3-5-veined.

obsoletely palmately 3-veined.

obsoletely palmately 3-veined.

palmately 5-7-veined (veins sometimes purple).

palmately 5-7-veined.

palmately or pinnately veined.

-

pinnately veined, secondary veins 6-8 per side, arising from 1/2 to 3/4 of primary vein, sharply ascending, impressed above.

pinnately veined, secondary veins 4-6 per side, originating at a steep angle from 3/4 or more of primary vein, 2-3 lower on

pinnately veined, secondary veins 7-10 per side, originating from throughout primary vein.

palmately 5-7-veined, tertiary venation obscure.

pinnately veined, secondary veins 6-10 per side, originating from throughout primary vein, plane above, prominulous below.

pinnately veined, secondary veins 8-12 per side, originating from throughout primary vein, plane to impressed above, prominent below.

pinnately veined, secondary veins 8-10 per side, originating from throughout primary vein, loop-connected towards apex, prominent below.

pinnately veined, secondary veins 10-16 per side, strongly curved, originating from throughout primary vein.

pinnately veined, secondary veins 8-12 per side, prominent on both sides, anastomosing well within margin, originating from throughout primary vein.

pinnately veined, secondary veins 5-6 per side, originating from lower 3/4 of primary vein.

pinnately veined, secondary veins 6-8 per side, flat to impressed above, prominent below, anastomosing well within margin, originating from throughout primary vein.

pinnately veined, secondary veins 2-3 per side, originating from lower 1/2 or 2/3 of primary vein, with many intermediates, originating from throughout primary vein.

pinnately veined, secondary veins 6-11 per side, originating from throughout primary vein, prominulous above, prominulous below.

secondary veins 4-7 per side, originating from throughout primary vein, tertiary venation widely reticulate.

pinnately veined, secondary veins 5-8 per side, originating from lower 3/4 or more of primary vein, flat above and prominent below.

pinnately veined, secondary veins 4-6 per side, originating from lower 1/2 of primary vein, flat above and below, tertiary venation obscure.

pinnately veined, secondary veins 6-12 per side, originating from throughout primary vein, clearly anastomosing within margin, originating from throughout primary vein.

pinnately veined, secondary veins 4-7 per side, originating from lower 1/2 or lower 2/3 of primary vein, ascending at an angle, originating from throughout primary vein.

Sheet1

pinnately veined, secondary veins 4-5 per side, originating from lower 1/2 of primary vein, prominent below.

pinnately veined, secondary veins (4-)6-8 per side, originating from throughout primary vein, plane above, prominent below.

pinnately veined, secondary veins 8-11 per side, originating from throughout primary vein, flat to impressed above, prominent below.

pinnately veined, secondary veins 5-6 per side, originating from lower 1/2 of primary vein, tertiary veins transverse and parallel.

pinnately veined, secondary veins 4-6 per side, originating from lower 3/4 of primary vein, at a wide angle and abruptly curved.

pinnately veined, secondary veins 4-8 per side, originating from lower 3/4 or 2/3 of primary vein, impressed above, tertiary veins transverse.

pinnately veined, secondary veins 5-6 per side, originating from lower 3/4 of primary vein.

pinnately veined, secondary veins 8-15 per side, originating from throughout primary vein, plane above, slightly prominent below.

pinnately veined, secondary veins 5-6 per side, originating from throughout primary vein, plane or inconspicuous above, slightly prominent below.

pinnately veined, secondary veins 5-7 per side, originating from throughout primary vein, prominent below, tertiary veins transverse.

pinnately veined, secondary veins 3-5 per side, originating from lower 1/3 of primary vein, impressed above, prominent below.

pinnately veined, secondary veins 5-7 per side, originating from lower 2/3 of primary vein, slightly impressed above, prominent below.

pinnately veined, secondary veins 4-5 per side, originating from lower 1/3 or more of primary vein, 2 originating from base of primary vein.

pinnately veined, secondary veins 5-8 per side, originating from lower 2/3 of primary vein, flat above, prominent below, tertiary veins transverse.

pinnately veined, secondary veins 5-6 per side, originating from lower 1/2 of primary vein, tertiary veins transversely reticulate.

pinnately veined, secondary veins 3-6 per side, originating from lower 3/4 of primary vein, at an angle of 60°, anastomosing near margin.

pinnately veined, secondary veins 3-5 per side, originating from lower 3/4 or more of primary vein, anastomosing, impressed above.

pinnately veined, secondary veins 6-8 per side, originating from throughout primary vein, impressed above, prominent below.

pinnately veined, secondary veins 5-6 per side, widely spaced, originating from lower 2/3 or more of primary vein, anastomosing near margin.

pinnately veined, secondary veins 4-6 per side, originating from lower 1/2 or 2/3 of primary vein, plane above, prominent below.

palmately 9-11-veined.

pinnately veined, secondary veins 3-5 per side, anastomosing near margin, originating from lower 3/4 of primary vein, tertiary veins transverse.

palmately-pinnately veined, secondary veins 2-3 per side, originating from lower 1/4 of primary vein, flat to prominent below.

pinnately veined, secondary veins 5-9, per side originating from lower 3/4 of primary vein.

pinnately veined, secondary veins (7-)8-12 per side, originating from throughout primary vein, impressed above, prominent below.

palmately 13-15-veined, veins radiating from petiole tip, and 2 pairs originating from central vein.

pinnately veined, secondary veins 6-7 per side, originating from lower 2/3 of primary vein, flat above, prominent below, tertiary veins transverse.

pinnately veined, secondary veins 4-6 per side, originating from lower 2/3 of primary vein, flat above, prominent below, tertiary veins transverse.

pinnately veined, secondary veins (5-)7-8 per side, originating from throughout primary vein, anastomosing well within margin.

palmately-pinnately veined, secondary veins 2-3 per side originating from lower 1/4 of primary vein, flat above, prominent below.

pinnately veined, secondary veins 3-4, originating from lower 1/2 of primary vein, ascending at an angle of ca. 45°, flat to prominent below.

pinnately veined, secondary veins 5-7 per side, originating from lower 1/2 of primary vein, prominent below, tertiary veins transverse.

palmately 5-7-veined, veins plane to impressed above, very prominent below, tertiary veins transverse.

pinnately veined, secondary veins 7-10 per side, originating from throughout primary vein, flat above, flat below, marginally prominent below.

pinnately veined, secondary veins 3-4 per side, originating from lower 1/2 to lower 2/3 of primary vein, ascending at an angle of ca. 45°, flat to prominent below.

pinnately veined, secondary veins ca. 5 per side, originating from lower 1/2 of primary vein, tertiary veins more or less parallel.

pinnately veined, secondary veins 4-7 per side, originating from lower 1/2 to 2/3 of primary vein, not anastomosing, impressed above.

pinnately veined, secondary veins 4-10, originating from throughout primary vein, anastomosing near margin.

pinnately veined, secondary veins 4-5 per side, originating from lower 2/3 of primary vein, not anastomosing, plane to impressed above.

Sheet1

/leaves/veins	/leaves/veins/minimum	/leaves/veins/maximum	/leaves/veins/shape
-	-	-	0
-	-	-	0
-		3	5
	3-	-	0
	3-	-	0
-		3	5
	3-	-	4306
	3-	-	4306
-		3	5
-		6	8
-	-	-	4306
-		9	11
-		7	11
-		7	9
	7-	-	4306
	3-	-	4306
	7-	-	4306
	3-	-	4306
-		5	7
-		4	5
-		2	3
	3-	-	4306
	3-	-	0
	3-	-	0
-		5	7
	3-	-	0
	3-	-	4306
-		3	5
	3-	-	4306
	3-	-	4306
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-		5	7
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-	-	-	0
-		1	3
-		3	6
-		7	10
-		5	7
-		6	10
-		8	12
-		8	10
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-		8	12
-		5	6
-		6	8
-		2	3
-		6	11
-		4	7
-		5	8
	46-	-	3445
-		6	12
-		4	7

Sheet1

-	4	5	0
-	6	8	0
-	8	11	3445
-	5	6	0
-	4	6	0
-	4	8	0
-	5	6	0
-	8	15	4306
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-	3	4	3445
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-	5	7	0
-	7	10	3445
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5 -	-		0
-	4	2	0
-	4	10	0
-	4	5	0

Sheet1

/leaves/veins/shape	/leaves/veins/shape	/leaves/veins/texture	/leaves/veins/texture
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0 -		0	0
0 -		0	0
0 -		0	0
0 -		0	0
10 ob		0	0
10 ob		0	0
10 ob		0	0
10 ob		0	0
10 ob		0	0
0 -		0	0
0 -		0	0
10 ob		0	0
10 ob		0	0
10 ob		0	0
10 ob		0	0
10 ob		0	0
0 -		0	0
0 -		0	0
0 -		0	0
10 ob		0	0
0 -		0	0
0 -		0	0
10 ob		0	0
0 -		0	0
10 ob		0	0
10 ob		0	0
10 ob		0	0
10 ob		0	0
0 -		0	0
0 -		0	0
0 -		0	0
0 -		0	0
0 -		0	0
0 -		0	0
0 -		0	0
0 -		0	0
10 ob		0	0
0 -		703	1
0 -		0	0
0 -		0	0
0 -		0	0
0 -		703	1
0 -		0	0
100 flat		703	1
0 -		0	0
0 -		0	0
0 -		0	0
100 flat		0	0
100 flat		0	0
0 -		703	1
10 ob		0	0

Sheet1

0 -	0	0
0 -	0	0
100 flat	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0
10 ob	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0
10 ob	0	0
100 flat	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	703	1
1 angular	0	0
0 -	0	0
0 -	0	0
100 flat	0	0
0 -	0	0
0 -	0	0
0 -	0	0
100 flat	0	0
100 flat	0	0
10 ob	703	1
100 flat	0	0
100 flat	0	0
0 -	0	0
0 -	0	0
100 flat	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0
0 -	0	0

Sheet1

/leaves/veins/texture	/leaves/veins/position	/leaves/veins/position	/leaves/veins/position
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-	0		0-
-	0		0-
-	0		0-
-	0		0-
-	0		0-
-	0		0-
-	0		0-
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-	0		0-
-	0		0-
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-	0		0-
-	0		0-
-	0		0-
-	0		0-
-	0		0-
-	0		0-
-	0		0-
-	23		1 lateral
-	0		0-
-	0		0-
-	0		0-
-	0		0-
-	0		0-
-	0		0-
-	0		0-
-	0		0-
-	0		0-
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-	0		0-
-	0		0-
-	0		0-
-	0		0-
-	0		0-
-	0		0-
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-	0		0-
-	0		0-
-	0		0-
-	0		0-
thin	0		0-
-	0		0-
-	0		0-
-	0		0-
thin	0		0-
-	0		0-
thin	0		0-
-	0		0-
-	0		0-
-	0		0-
-	0		0-
-	0		0-
thin	0		0-
-	0		0-

Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

[illegible]

/stems

-
-

Stem ascending,

Stem glabrous, |, green or reddish.

Stem villous, often fuscous, green or reddish,

Stem minutely hirtellous (spreading hairs

-

Stem minutely pubescent to glabrous, |, green or green with red spots or reddish.

Stem |, green or reddish, glabrous, except for lines of hairs decurrent from nodes.

Stem glabrous, |, whitish green.

Stem ascending.

Stem |, retrorsely minutely crisp-pubescent, green and reddish.

Stem glabrous, |, green or reddish.

Stem glabrous, |, green or green with red nodes.

Stem erect, creeping or ascending, rooting at nodes, |, glabrous, green or green with red spots.

Stem loosely villous, |, green or reddish brown.

Stem erect, creeping or ascending, rooting at nodes, glabrous, green or green with red spots.

Stem loosely villous, |, green to reddish.

Stem |, green often reddish tinged.

Stem |, green.

Stem glabrous, green.

Stem glabrous to minutely pubescent (with white hairs, Persaud 52), |, reddish.

Stem quadrangular, minutely pubescent,

Stem erect to ascending, glabrous, |, green or reddish.

Stem succulent, glossy, retrorsely crisp-pubescent, green with red spots or reddish.

Stem sparsely pubescent.

Stem crisp-pubescent when young,

Stem minutely crisp-pubescent,

Stem glabrous to somewhat minutely pubescent, |, fertile stems erect.

Stem |, minutely pubescent, green.

Stem |, green or red.

Stem rooting at nodes, ascending, crisp-pubescent, glabrescent.

Stems usually with swollen nodes.

-

Stem sparsely pubescent to glabrescent;

-

-

Stem glabrous or minutely pubescent on upper internodes.

Stem retrorsely pubescent with swollen nodes.

Stem glabrous except for 1 or 2 subnodal lines of hairs decurrent from petioles.

Stem glabrous or minutely pubescent, upper internodes smooth or somewhat lenticellate.

-

Stem striate or canaliculate, glabrous.

-

-

Stem glabrous.

Stem densely retrorsely pubescent with hairs

Stem somewhat yellow-glandular, pilose, hairs

Stem densely pubescent.

Stem glabrous.

-

Stem glabrescent.

- Stem pilose with hairs
Stem crisp-pubescent or sometimes appressed-pubescent.
Stem crisp-pubescent or scabrous.
Stem glabrous.
Stem densely hirsute.
Stem glabrous, densely dark glandular-dotted.
- Stem glabrous.
Stem densely crisp- pubescent.
Stem pubescent.
Stem glabrescent.
Stem ribbed, glabrous, younger parts sparsely pubescent.
Stem long-hirsute, hairs
Stem hirsute to glabrescent.
Stem crisp-pubescent.
Stem villous often with white hairs.
Stem ridged, pubescent with recurved hairs.
- Stem, petiole and peduncle and even primary vein below maybe reddish (brown), or yellowish, glabrous.
- Stem glabrous, young ones often reddish.
Stem glabrous.
Stem densely pubescent to glabrescent.
Stem hirsute.
- Stem glabrous.
- Stem glabrous or glabrescent;
- Stem densely retrorsely crisp-pubescent.
Stem and branches sparsely to densely pubescent.
Stem often with spines opposite petiole; |, nodes glandular-dotted.
Stem glabrous, glandular.
Stem glabrous or may be sparsely appressed-pubescent.
Stem retrorsely villous.
Stem crisp-pubescent.
- Stem densely pubescent or hirsute, hairs often reddish brown (

Sheet1

/stems/shape	/stems/shape	/stems/shape	/stems/texture	/stems/texture	/stems/texture
0	0-		0	0-	
0	0-		0	0-	
0	0-		0	0-	
0	0-		0	0-	
0	0-		0	0-	
0	0-		0	0-	
0	0-		0	0-	
0	0-		0	0-	
2584	10 decurrent		0	0-	
0	0-		0	0-	
0	0-		0	0-	
0	0-		0	0-	
0	0-		0	0-	
0	0-		0	0-	
0	0-		0	0-	
0	0-		0	0-	
0	0-		0	0-	
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0	0-		0	0-	
0	0-		0	0-	
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0	0-		0	0-	
5659	1 quadrangular		0	0-	
0	0-		0	0-	
0	0-		0	0-	
0	0-		0	0-	
0	0-		0	0-	
0	0-		0	0-	
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0	0-		0	0-	
0	0-		0	0-	
2584	10 decurrent		0	0-	
0	0-		586	10 smooth	
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0	0-		0	0-	

Sheet1

[illegible]

Sheet1

/stems/hairs	/stems/hairs	/stems/hairs	/stems/growth form
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0	0 -		0
71	1 glabrous		0
596	1000000000 villous		0
106	100000100 hairs,hirtellous		211
0	0 -		0
391	10 pubescent to glabrous		0
71	100000001 glabrous,hairs		0
71	1 glabrous		0
0	0 -		0
386	10000000000 pubescent		0
71	1 glabrous		0
71	1 glabrous		0
71	1 glabrous		22
596	1000000000 villous		0
71	1 glabrous		22
596	1000000000 villous		0
0	0 -		0
0	0 -		0
71	1 glabrous		0
71	10100000001 glabrous,hairs,pubescent		0
386	10000000000 pubescent		0
71	1 glabrous		43
386	10000000000 pubescent		0
386	10000000000 pubescent		0
386	10000000000 pubescent		0
386	10000000000 pubescent		0
71	10000000001 glabrous,pubescent		43
386	10000000000 pubescent		0
0	0 -		0
71	10010000000 glabrescent,pubescent		0
0	0 -		0
0	0 -		0
391	1.0000E+011 pubescent to glabrescent		0
0	0 -		0
0	0 -		0
71	10000000001 glabrous,pubescent		0
386	10000000000 pubescent		0
71	100000001 glabrous,hairs		0
71	10000000001 glabrous,pubescent		0
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0	0 -		0
0	0 -		0
71	1 glabrous		0
106	10100000000 hairs,pubescent		0
106	100001000 hairs,pilose		0
386	10000000000 pubescent		0
71	1 glabrous		0
0	0 -		0
71	10000000 glabrescent		0

Sheet1

0	0 -	0
106	100001000 hairs,pilose	0
386	10000000000 pubescent	0
386	10000000000 pubescent	0
71	1 glabrous	0
141	10000 hirsute	0
71	1 glabrous	0
0	0 -	0
71	1 glabrous	0
386	10000000000 pubescent	0
386	10000000000 pubescent	0
71	10000000 glabrescent	0
71	10000000001 glabrous,pubescent	0
106	100010000 hairs,hirsute	0
146	1000000 hirsute to glabrescent	0
386	10000000000 pubescent	0
106	1100000000 hairs,villous	0
106	10100000000 hairs,pubescent	127
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71	1 glabrous	0
0	0 -	0
71	1 glabrous	0
71	1 glabrous	0
391	1.0000E+011 pubescent to glabrescent	0
141	10000 hirsute	0
0	0 -	0
71	1 glabrous	0
0	0 -	0
71	1 glabrous	0
0	0 -	0
386	10000000000 pubescent	0
386	10000000000 pubescent	0
0	0 -	0
71	1 glabrous	0
71	10000000001 glabrous,pubescent	0
596	1000000000 villous	0
386	10000000000 pubescent	0
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106	10100110000 hairs,hirsute,pubescent,pubescent or hirsute	0

Sheet1

[illegible]

Sheet1

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0-	0	0-
0-	0	0-
0-	0	0-
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0-	0	0-
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0-	0	0-
0-	0	0-
0-	2415	10 white
1000 recurved	0	0-
0-	0	0-
0-	285	110010000 brown,reddish,yellowish
0-	0	0-
0-	1705	100000000 reddish
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0-	0	0-
0-	0	0-
0-	0	0-
0-	0	0-
0-	0	0-
0-	0	0-
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0-	0	0-
0-	0	0-
0-	0	0-
0-	0	0-
0-	0	0-
0-	0	0-
0-	0	0-
0-	0	0-
0-	0	0-
0-	0	0-
0-	285	110000000 brown,reddish

Sheet1

[illegible]

/habitat

-
-
-

in forests,

-
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-
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in non-flooded moist forest, creeping and forming loose mats along creeks on rocks, on the forest floor, or on fallen logs,

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in wet forest,

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-
-
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-
-

in dense forest on sandstone,

in savanna forest,

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-
-

humid forests

-

in forests especially cloud forests

-

on granitic rocks

-

Weedy species in secondary vegetation, most species are found in the understory of various types of forest, in open spaces

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in open or somewhat shady places.

in forest or even in secondary vegetation, often on granitic outcrops;

from understory of mixed forest (on slopes);

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in primary forest,

-

in moist tropical rain forest high, dense, mixed or swamp forest, occasionally in secondary vegetation, often in humid places, also recorded from secondary vegetation,

in lowland moist forest,

in (dense) forest, in river-bank or marsh forest and in secondary vegetation.

in forest on terra firme and in marsh forest, on sand, clay or granite,

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-
-

in moist forest, swampy vegetation and stream sides,

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understorey of primary forest or swampy forest, or open forest on laterite;

riverine flood plain forest on white and brown sands, from mud in wet forest on granitic rocks, red clay or deep mud along

-
virgin forest, mossy cloud forest, forest on granite and from open places,
in dense forest, montane forest, growing on brown sand with granite boulders or on sandstone
-
in riverine forest, swamp forest, occasionally reported from regenerating forest.
dense forest on brown sand,
mainly from dense forest, or swampy places,
in dense forest understorey,
-
-
on edges of streams in savanna areas, in Brazil
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-
in dense forest on brown sand,
in secondary vegetation, on creek banks in forest and in dense forest,
-
often on rocks and in humid places in primary forest,
-
in forest,
dark, humid, primary forest or swamp forest,
-
in forest
-
in moist forest
-
-
-
-
non-flooded moist forest, or along riverbanks
in understorey of primary rainforest and from secondary vegetation
-
in (dense) forest,
recorded mainly from secondary vegetation,
-
in clearings, damp places, open and mixed forest, shady rocky areas,
-
-
mostly in dry areas.
in primary forest, and occasionally from secondary vegetation,

Sheet1

[illegible]

Sheet1

[illegible]

Sheet1

/habitat/colour	/habitat/altitude	/habitat/altitude	/habitat/altitude/minimum
-	-	-	-
-	-	-	-
-	from 0 up to 1700 m	-	0
-	from 0 up to 2400 m	-	0
-	above 200 m, up to 1100 m	-	200
-	above 2000 m	-	2000
-	from 0 to 600 m	-	0
-	2250-2500 m, 2700 m	-	2250
-	from 0 up to 2400 m	-	0
-	between 150-500 m	-	150
-	200-700 m	-	200
-	500-2000 m	-	500
-	700-1600 m	-	700
-	from 0 to 1800 m	-	0
-	from 0 to over 1200 m	-	0
-	up to 700 m	-	-
-	from 0 to over 1200 m	-	0
-	from 0 to 850-1400 m	-	0
-	-	-	-
-	to 700 m	-	-
-	-	-	-
-	1120-2750 m	-	1120
-	up to 200 m	-	-
-	1000-2800 m	-	1000
-	300-1900 m	-	300
-	-	-	-
-	from 0 up to 1000 m	-	0
-	from 0 to 1200 m	-	0
-	high altitudes up to 1580 m	-	-
-	at higher altitudes	-	-
-	250-850 m	-	250
-	200-800-1200? m	-	200
-	from 0 to 2000 m	-	0
-	from 0 to 500 m	-	0
-	-	-	-
-	from 0 to 1500 m	-	0
-	to 750 m	-	-
-	from 0 to 1500 m	-	0
-	up to 500 m	-	-
-	-	-	-
-	from 0 to 1500 m	-	0
-	from 0 to 1500 m	-	0
-	200-450 m	-	200
-	-	-	-
-	up to 700 m	-	-
-	800-1100 m	-	800
-	up to 650 m	-	-
-	from 0 to 700 m	-	0
-	from 0 to 700 m	-	0
-	to 850 m	-	-
-	up to 650 m	-	-
brown,red,white	from 0 to 650 m	-	0

Sheet1

-	-	-	-	
-	up to 700 m	-	-	
brown	20-720 m	-	-	20
-	-	-	-	
-	-	-	-	
brown	240 m		240 -	
-	up to 700 m	-	-	
-	up to 639 m	-	-	
-	600-1500 m	-	-	600
-	-	-	-	
-	up to 1200 m	-	-	
-	up to 900 m	-	-	
-	-	-	-	
brown	240-700 m	-	-	240
-	from 0 to 700 m	-	-	0
-	-	-	-	
-	up to 800 m	-	-	
-	-	-	-	
-	to 150 m	-	-	
-	from 0 to 700 m	-	-	0
-	-	-	-	
-	from 0 to 700 m	-	-	0
-	-	-	-	
-	from 0 to 2000 m	-	-	0
-	up to 1600 m	-	-	
-	-	-	-	
-	500-1275 m	-	-	500
-	-	-	-	
-	up to 660 m	-	-	
-	10-600 m	-	-	10
-	to 260 m	-	-	
-	20-300 m	-	-	20
-	to 450 m	-	-	
-	-	-	-	
-	from 0 to 1600 m	-	-	0
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	from 0 to 600 m	-	-	0

/habitat/altitude/maximum

-

-

1700

2400

1100

-

600

2500

2400

500

700

2000

1600

1800

1200

700

1200

850-1400

-

700

-

2750

200

2800

1900

-

1000

1200

1580

-

850

800

2000

500

-

1500

750

1500

500

-

1500

1500

450

-

700

1100

650

700

700

850

650

650

Sheet1

-	700
	720
-	
-	
-	
	700
	639
	1500
-	
	1200
	900
-	
	700
	700
-	
	800
-	
	150
	700
-	
	700
-	
	2000
	1600
-	
	1275
-	
	660
	600
	260
	300
	450
-	
	1600
-	
-	
-	
	600