

**Table 1S.** List of accepted species worldwide of genus *Kaempferia*<sup>4</sup>

1	<i>K. alboviolacea</i> Ridl.	13	<i>K. galanga</i> L.	25	<i>K. parviflora</i> Wall. ex Baker
2	<i>K. angustifolia</i> Roscoe	14	<i>K. galanga</i> var. <i>latifolia</i> (Donn) Gagnep.	26	<i>K. philippinensis</i> Merr.
3	<i>K. attapeuensis</i> Picheans. & Koonterm	15	<i>K. gigantiphylla</i> Picheans. & Koonterm	27	<i>K. pulchra</i> Ridl.
4	<i>K. candida</i> Wall.	16	<i>K. gilbertii</i> W.Bull	28	<i>K. purpurea</i> J.Koenig
5	<i>K. champasakensis</i> Picheans. & Koonterm	17	<i>K. glauca</i> Ridl.	29	<i>K. roscoeana</i> Wall.
6	<i>K. chayanii</i> Koonterm	18	<i>K. grandifolia</i> Saensouk & Jenjitt.	30	<i>K. rotunda</i> L.
7	<i>K. cuneata</i> Gagnep.	19	<i>K. harmandiana</i> Gagnep.	31	<i>K. saraburiensis</i> Picheans.
8	<i>K. elegans</i> (Wall.) Baker	20	<i>K. koratensis</i> Picheans.	32	<i>K. sawanensis</i> Picheans. & Koonterm
9	<i>K. evansii</i> Blatt.	21	<i>K. laotica</i> Gagnep.	33	<i>K. siamensis</i> Sirirugsa
10	<i>K. fallax</i> Gagnep.	22	<i>K. larsenii</i> Sirirugsa	34	<i>K. simaoensis</i> Y.Y.Qian
11	<i>K. filifolia</i> K.Larsen	23	<i>K. lopburiensis</i> Picheans.	35	<i>K. sisaketensis</i> Picheans. & Koonterm
12	<i>K. fissa</i> Gagnep.	24	<i>K. ovalifolia</i> Roxb.	36	<i>K. spoliata</i> Sirirugsa
				37	<i>K. undulata</i> Teijsm. & Binn.

**Table 2S.** The morphological characteristics of several *Kaempferia* species

General	<i>K. galanga</i> <sup>3,9</sup> Herb, 2- 5 cm tall	<i>K. elegans</i> <sup>9</sup> Herb, 10-20cm tall	<i>K. parviflora</i> <sup>9</sup> Herb, 6-10cm tall	<i>K. rotunda</i> <sup>3,9</sup> Herb, 12-30cm tall	<i>K. roscoeana</i> <sup>9</sup> Herb, 2 cm tall
Rhizome	Strongly aromatic, with roots bearing tubers; lamina broadly ovate to orbicular.	Fibrous roots bearing globose tubers	Dark purple with several succulent roots in fascicle	Aromatic with roots bearing tubers	Stout with several root tubers
Leaves	Mostly 2, sessile, horizontal, flat on ground, blades ovate to suborbicular, unequal sided, apex mucronate or acute, upper surface glabrous, under surface softy hairy, Leafy stem is short or absent	Usually 2, erect; blades elliptic or elliptic-oblong	1 to several; blades ovate or elliptic, slightly unequal sided	2-4, erect, blades elliptic or lanceolate- oblong, apex acute, base cuneate, upper surface glabrous, under surface hairy, ligule small, hairy.	2, flat on the ground, rather thick, sessile, blades suborbicular, apex mucronate, base rounded-cuneate, both surfaces glabrous, upper surface mottled dark green
Inflorescence	sessile, enclosed by the two leaf sheaths, bracts bifarious, outer larger, inner smaller ovate-acuminate, white	Rising between the leaf-sheaths, usually elongate.	Enclosed by the two innermost leaf-sheaths or by the leaf-sheath	appearing before the leaves, shortly pedunculated, enclosed within greenish-purple	Short and compact, enclosed by the two leaf-sheaths
Flowers	Many, spirally arranged, produced singly in the axils of bracts	Several	few	several	few
Bract / bracteoles	Bracts lanceolate, acuminate, glabrous Bracteoles linear, split to the base, transparent	Bracts lanceolate, 2.5-6 cm long, apex acute Bracteoles unequal, lanceolate	Bracts oblong, glabrous, apex rounded	Bracts keeled, lanceolate, hairy, apex mucronate, ciliate Bracteoles keeled, hairy, apex acute, ciliate	Bracts oblong, 2.2 cm long, apex acuminate, glabrous Bracteoles folded, linear, glabrous, apex hooded, acute
Calyx	2-2.5 cm long, glabrous, apex bifid, equal to or shorter than the bracts	2-3 long, sparsely hairy, apex acute or bifid, ciliate	1.8-2.2 cm long, finely hairy, apex bifid	3-5.2 cm long, hairy, apex bilobed, unilaterally split, light violetish, transparent.	2 cm long, glabrous, apex bifid
Corolla	Corolla-tube 3-4 cm long; lobes white, lanceolate, lateral lobes apex keeled, blunt.	Corolla-tube 5-7 cm long, lobes lanceolate - linear; lateral lobes apex obtuse	Corolla-tube 3-3.2 cm long, lobes linear; lateral lobes slightly smaller, apex rounded	Corolla tube 5-5.5 cm, slightly longer than the calyx, lobes white, very narrow, lanceolate with acuminate tip	Corolla tube 4 cm long, lobes oblong, lateral lobes 1.3 cm long, apex hooded blunt
Staminode	Obovate-cuneate or oblanceolate	Broadly obovate or suborbicular	White, oblong, apex acute or rounded	White, purple-tinted, oblong, apex rounded	Pure white, obovate
Labellum	slightly broader than long, divided to the base, each lobe obovate, white, apex irregularly creanate	Divided to the base, each lobe obovate	Purple, darker at the middle, obovate, apex emarginate	Purple, deeply bilobed, broadly ovate, each lobe elliptic, apex rounded or mucronate.	White with yellow spot at the base, divided to the base, each lobe obovate, apex rounded
Stamen	With very short filament, ca. 2 mm long	With very short filament	With very short filament, ca. 1 mm long	With short filament, ca. 3 mm long	Sessile
Anther	white, sessile, 3-4 mm long, anther-crest deeply	3 mm long, anther-crest orbicular	Ca. 2 mm long, anther-crest	Ca 5 mm long, anther-crest oblong, 3-lobed; the outer	Ca. 3 mm long, anther-crest keeled, ovate, entire

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	bilobed, each lobe rounded or unequally toothed.		suborbicular, entire or emarginate	lobes acute and elongate, the middle shorter, entire or emarginate	
Ovary	Glabrous, stylodes filiform ca 6 mm long, ovules several	Hairy; ovules many	Hairy, stylodes filiform 8-9 mm long	Hairy, stylodes linear, 3-5 mm long, ovules many	Glabrous, styles filiform, 3 mm long, ovules many
Stigma	globular with a lateral slit			slightly flattened and cupular, margin hairy	