

# GLOSSARY – GLOSSAIRE

This glossary covers only those terms used in the English descriptions in *Sangha Trees* and their meanings as used in this book. It is presented in alphabetical order. The definitions of some terms are based on those in Hawthorne & Jongkind (2006) and Stearn (1992), in which definitions of many more botanical terms may be found. For a glossary of French terms, refer to Jouy (2006) or the website of the Missouri Botanical Garden (<http://www.mobot.org/mobot/glossary/>).

Le glossaire ne couvre que les termes en usage dans les descriptions en anglais de *Sangha Trees* et le sens qu'on leur donne dans l'ouvrage. Le glossaire est présenté par ordre alphabétique. La définition de certains termes repose sur celle donnée dans Hawthorne & Jongkind (2006) et Stearn (1992), dans lesquels se trouvent bien plus de termes botaniques expliqués. Pour un glossaire des termes français, il est conseillé de se référer à Jouy (2006) ou au site internet du Missouri Botanical Garden (<http://www.mobot.org/mobot/glossary/>).

<b>Acumen</b>	tapering leaf apex
<b>Acuminate</b>	(leaf apex) having a distinct, often abrupt, tapering tip; see also <b>acute</b>
<b>Acute</b>	(leaf apex) pointed, with more or less straight sides at an angle of less than 90° to one another; see also <b>acuminate</b>
<b>Alternate</b>	(leaves) arranged one per node; see also <b>opposite</b>
<b>Ant holes</b>	openings, usually in twigs, by which ants pass into and out of the host plant; e.g. <i>Rothmannia macrocarpa</i> (Rubiaceae)
<b>Apex</b>	tip, growing point, part furthest from base (of leaf, stem or whole plant)
<b>Apical</b>	at or towards the apex
<b>Appendage</b>	extension or outgrowth; e.g. rachis of <i>Chytranthus carneus</i> (Sapindaceae)
<b>Appressed</b>	(hairs) lying flat against a surface
<b>Articulated</b>	jointed, with a noticeable bend or invagination at node; e.g. rachis of <i>Kigelia africana</i> (Bignoniaceae)
<b>Ascending</b>	(veins) arching upwards towards the leaf tip
<b>Asymmetric</b>	having two sides which are not mirror-images of one another; e.g. leaflet of <i>Zanthoxylum gillettii</i> (Rutaceae); see also <b>symmetric</b>
<b>Auriculate</b>	ear-shaped
<b>Awn</b>	long, narrow appendage, usually referring to part of a stipule; e.g. <i>Tricalysia filiformi-stipulata</i> var. <i>filiformi-stipulata</i> (Rubiaceae); see also <b>collar</b>
<b>Axil</b>	inner side of the junction between a smaller and a larger structure, e.g. between petiole and stem, or between secondary vein and midrib; see also <b>axillary</b>
<b>Axillary</b>	found in an axil
<b>Bacterial nodule</b>	dark markings of varying shape and size in lamina of some Rubiaceae leaves, containing bacteria; e.g. <i>Pavetta calothyrsa</i> (Rubiaceae)
<b>Bipinnate</b>	(leaf) compound, with two levels of branching; e.g. <i>Parkia filicoidea</i> (Leguminosae-Mimosoideae); see also <b>leaflet, pinna</b>
<b>Blunt</b>	rounded- or flat-tipped, not sharp, usually referring to a leaf tip which is neither acute nor acuminate
<b>Bole</b>	trunk, the portion of a tree below the first branch
<b>Bullate</b>	(lamina) forming a series of convex portions between the veins, which are usually strongly impressed; e.g. <i>Warneckea jasminoides</i> (Melastomataceae)
<b>Buttress</b>	narrow vertical outgrowth at base of tree; e.g. <i>Piptadeniastrum africanum</i> (Leguminosae-Mimosoideae)
<b>Caducous</b>	(stipule) falling soon after formation, typically present only on buds; see also <b>persistent</b>
<b>Cave</b>	(domatia) in the form of a hollow, the opening being smaller than the diameter of the hole beneath; e.g. <i>Tricalysia pallens</i> (Rubiaceae); see also <b>pit, pocket, tuft</b>

<b>Chaffy</b>	dry and membranous in texture
<b>Channelled</b>	(midrib) sunk into a groove in the lamina; (petiole or rachis) having a central, longitudinal, sunken groove; e.g. petiole of <i>Diospyros canaliculata</i> (Ebenaceae)
<b>Clustered</b>	situated close together on an axis, usually referring to leaves on a branch; see also <b>whorled</b>
<b>Collar</b>	narrow band, usually referring to the short cylindrical portion of stipule which is often tipped by an awn; e.g. <i>Rytigynia verruculosa vel sp. aff.</i> (Rubiaceae)
<b>Compound</b>	(leaf) comprising more than one leaflet, each having the general appearance of a leaf; see also <b>leaflet, pinna, rachis</b>
<b>Connate</b>	appearing joined, often referring to paired stipules united at base; e.g. <i>Gardenia vogelii</i> (Rubiaceae); see also <b>free</b>
<b>Cordate</b>	(leaf base) heart-shaped, with rounded lobes forming an indentation at the petiole; e.g. <i>Buchnerodendron speciosum</i> (Achariaceae); see also <b>cuneate, rounded</b>
<b>Corky</b>	having the appearance of cork: pale, thickened, rough or spongy in texture
<b>Crinkly</b>	(leaf margin) with many small wrinkles or ripples; see also <b>undulate</b>
<b>Crossed</b>	(hairs) several (c. 4) in a cluster, arising from a single point, giving the appearance of a cross; e.g. <i>Duboscia macrocarpa vel sp. aff.</i> (Malvaceae); see also <b>stellate</b>
<b>Cuneate</b>	(leaf base) wedge-shaped, tapering with straight sides meeting at the base; e.g. <i>Manilkara maboakensis</i> (Sapotaceae); see also <b>cordate, rounded</b>
<b>Decurrent</b>	(leaf base) running along, extending down petiole in a narrow wing; e.g. <i>Ficus wildemaniana</i> (Moraceae)
<b>Discolorous</b>	(leaf) having upper and lower surfaces of different colours
<b>Domatia</b>	distinct structures in the axils of secondary or smaller veins, often comprising indentations in the surface or tufts of hair; see also <b>cave, pit, pocket, tuft</b>
<b>Dots</b>	small, usually round, markings or structures such as glands
<b>Drip-tip</b>	elongated acuminate tip, typically parallel-sided for several mm or more; e.g. <i>Santiria trimera</i> (Burseraceae)
<b>Elliptic</b>	broadest at about the middle, with smoothly curving edges; e.g. leaf of <i>Ongokea gore</i> (Olacaceae); see also <b>lanceolate, oblong, obovate, ovate</b>
<b>Emarginate</b>	(leaf tip) notched; e.g. <i>Copaifera mildbraedii</i> (Leguminosae-Caesalpinioideae)
<b>Entire</b>	(leaf margin) lacking teeth or lobes
<b>Exfoliating</b>	(bark) shedding, often by peeling off in scales or sheets
<b>Exudate</b>	any kind of fluid secreted, usually from slash; see also <b>latex</b>
<b>Falcate</b>	sickle-shaped, curved sideways; e.g. leaflets of <i>Albizia laurentii</i> (Leguminosae-Mimosoideae)
<b>Fibrous</b>	(bark or slash) with long, thin strings; see also <b>granular, gritty</b>
<b>Fissure</b>	(bark) long, narrow crack
<b>Fleshy</b>	succulent, thick and firm yet soft and easy to cut
<b>Flushing</b>	(leaves) that are very young and differ from older ones in colour and other characteristics
<b>Fluted</b>	(bole) having vertical channels and rounded ridges ascending from the base
<b>Free</b>	not fused, often referring to stipules; see also <b>connate</b>
<b>Glabrescent</b>	almost glabrous or becoming glabrous with age
<b>Glabrous</b>	hairless
<b>Gland</b>	secretory structure, used to refer to multicellular structures (other than hairs) differing from the surrounding tissue; e.g. <i>Croton haumanianus</i> (Euphorbiaceae)
<b>Glandular</b>	having the appearance of a gland, but of uncertain function; also used to mean covered with glands
<b>Glaucous</b>	(lamina) having a blueish or whitish hue
<b>Granular</b>	(slash) with small, approximately spherical particles; see also <b>fibrous, gritty</b>
<b>Gritty</b>	(bark or slash) with small, hard particles like sand; see also <b>fibrous, granular</b>

<b>Guttered</b>	having channels along each side
<b>Impressed</b>	(veins) sunken, as if pressed in to the surface of the lamina; see also <b>prominent</b>
<b>Involute</b>	(leaf margin) rolled up; see also <b>revolute</b>
<b>Keel</b>	prominent longitudinal ridge, often referring to stipules; e.g. <i>Nauclea diderrichii</i> (Rubiaceae)
<b>Lamina</b>	leaf or leaflet blade, not including petiole or petiolule
<b>Lanceolate</b>	narrow, typically more than three times as long as broad; see also <b>elliptic, oblong, obovate, ovate</b>
<b>Latex</b>	opaque exudate, usually whitish or yellowish and milky or sticky
<b>Laticifer</b>	latex-producing or containing structure, typically seen as a translucent or dark vessel in lamina; e.g. <i>Garcinia punctata</i> (Guttiferae)
<b>Lax</b>	(venation) not dense, with large spaces between; see also <b>tight</b>
<b>Leaflet</b>	leaf-like division of a compound leaf
<b>Leathery</b>	with texture like leather, thick, tough and pliable; see also <b>papery</b>
<b>Lenticel</b>	small (<2 mm) corky, raised structure on bark or twigs, usually circular or elongated, allowing passage of gases; e.g. <i>Trichilia rubescens</i> (Meliaceae)
<b>Lobe</b>	large division of lamina; e.g. <i>Triplochiton scleroxylon</i> (Malvaceae); see also <b>entire</b>
<b>Margin</b>	edge (of lamina)
<b>Matt</b>	dull, not shiny
<b>Mature</b>	well-grown, old enough to bear flowers and fruit; see also <b>sapling</b>
<b>Midrib</b>	central, largest vein in a leaf or leaflet; see also <b>secondary, tertiary</b>
<b>Mucronate</b>	(leaf tip) ending in a stiff point
<b>Node</b>	point of attachment of leaf, flower or branch on stem
<b>Oblanceolate</b>	narrow, typically more than three times as long as broad, and broadest above the middle; e.g. <i>Englerophytum oubanguiense</i> (Sapotaceae); see also <b>lanceolate, obovate</b>
<b>Oblong</b>	with sides more or less parallel, broadest at about the middle; see also <b>elliptic, lanceolate, obovate, ovate, parallel-sided</b>
<b>Obovate</b>	broadest above the middle; see also <b>elliptic, lanceolate, oblong, ovate</b>
<b>Obscure</b>	more or less invisible to the naked eye, usually referring to veins
<b>Obtuse</b>	blunt or flat-ended, usually referring to leaf base or tip; e.g. <i>Ficus natalensis</i> ssp. <i>leprieurii</i> (Moraceae)
<b>Opposite</b>	(leaves) arranged two per node; see also <b>alternate</b>
<b>Orbicular</b>	more or less circular
<b>Ovate</b>	egg-shaped, broadest below the middle; see also <b>elliptic, lanceolate, oblong, obovate</b>
<b>Oxidising</b>	(slash) changing colour on exposure to the air, usually becoming darker
<b>Palmate</b>	having more than three parts arranged like the fingers of a hand, refers to the leaflets of a compound leaf or the lobes of a simple leaf; e.g. <i>Vitex welwitschii</i> vel sp. aff. (Labiatae)
<b>Papery</b>	with texture like paper, thin yet pliable; see also <b>leathery</b>
<b>Parallel-sided</b>	(leaf) the two edges remaining the same distance apart for at least part of their length; see also <b>oblong</b>
<b>Persistent</b>	(stipule) remaining attached; see also <b>caducous</b>
<b>Petiolate</b>	(leaf) having a petiole; see also <b>sessile</b>
<b>Petiole</b>	leaf stalk
<b>Petiolule</b>	leaflet stalk
<b>Pinna</b>	secondary axis of a bipinnate leaf, to which the leaflets are attached; e.g. <i>Piptadeniastrum africanum</i> (Leguminosae-Mimosoideae); see also <b>rachis</b>

<b>Pinnate</b>	(leaf) compound, with leaflets attached along a single axis; e.g. <i>Dialium tessmannii</i> (Leguminosae-Caesalpinioideae); see also <b>rachis</b>
<b>Pit</b>	(domatia) in the form of an indentation in the surface of the lamina or vein, with or without hairs; e.g. <i>Funtumia elastica</i> (Apocynaceae); see also <b>cave, pocket, tuft</b>
<b>Pocket</b>	(domatia) in the form of a pouch formed in the axil of two veins, with an opening to the side opposite the axil; e.g. <i>Petersianthus macrocarpus</i> (Lecythidaceae); see also <b>cave, pit, tuft</b>
<b>Pouch</b>	(domatia) in the form of a large indentation at leaf base; e.g. <i>Gardenia imperialis</i> ssp. <i>physophylla</i> (Rubiaceae)
<b>Process</b>	small outgrowth of any kind; e.g. petiole of <i>Vernonia titanophylla</i> (Compositae)
<b>Prominent</b>	(veins) raised above the lamina; see also <b>impressed</b>
<b>Pseudostipule</b>	structure resembling a stipule; usually the lowest pair of leaflets on a compound leaf, reduced in size and attached at the base of the petiole; e.g. <i>Eriocoelum</i> sp. A (Sapindaceae)
<b>Pubescent</b>	hairy, the hairs usually soft and short
<b>Pustule</b>	raised bump, usually on lower side of lamina; e.g. <i>Syzygium staudtii</i> vel sp. aff. (Myrtaceae)
<b>Rachis</b>	the main axis of a compound leaf, above the first leaflet, or above the first pinna of a bipinnate leaf; see also <b>petiole, pinna</b>
<b>Resin</b>	scented exudate, usually from cut bark
<b>Reticulate</b>	(veins, usually tertiary) net-like, forming a pattern of intersecting lines; e.g. <i>Dialium pachyphyllum</i> (Leguminosae-Caesalpinioideae); see also <b>scalariform</b>
<b>Revolute</b>	(leaf margin) rolled under; e.g. <i>Aptandra zenkeri</i> (Olacaceae); see also <b>involute</b>
<b>Ring scar</b>	scar encircling a stem, usually formed by attachment of stipule; e.g. <i>Tetrorchidium didymostemon</i> (Euphorbiaceae)
<b>Rounded</b>	(leaf base) the edges forming a smooth arc; e.g. <i>Ficus kamerunensis</i> (Moraceae); see also <b>cordate, cuneate</b>
<b>Sapling</b>	young tree, typically <10 cm dbh, with leaves sometimes differing to those of older specimens of the same species; see also <b>mature</b>
<b>Scabrid</b>	rough to touch
<b>Scalariform</b>	(veins, usually tertiary) ladder-like, parallel to one another; e.g. <i>Dasylepis seretii</i> (Achariaceae); see also <b>reticulate</b>
<b>Secondary</b>	(vein/venation) lateral, second order, branching directly off the midrib; see also <b>midrib, tertiary</b>
<b>Sessile</b>	(leaf or leaflet) having no stalk; e.g. leaflet of <i>Zanthoxylum gillettii</i> (Rutaceae); see also <b>petiolate, sub-sessile</b>
<b>Shaggy</b>	(bark) covered with hanging pieces, giving somewhat hairy or messy appearance
<b>Simple</b>	(leaf) unbranched, with a single main axis and one continuous lamina; see also <b>compound</b>
<b>Slash</b>	the wound left by making a vertical cut in the bole of a tree (usually with a machete) to remove the outer layers of bark
<b>Spathulate</b>	(leaf apex) spoon-shaped, with a broad, rounded tip; e.g. <i>Calycosiphona spathicalyx</i> (Rubiaceae)
<b>Spine</b>	any kind of sharp projection from a woody part of the plant; e.g. twigs of <i>Vangueriella orthacantha</i> (Rubiaceae)
<b>Stellate</b>	(hairs) in a cluster arising from a single point, giving the appearance of a star; e.g. <i>Christiana africana</i> (Malvaceae); see also <b>crossed</b>
<b>Stilt root</b>	woody root emerging from bole above ground and growing down into the ground
<b>Stipel</b>	structure at base of petiolule; e.g. <i>Millettia drastica</i> (Leguminosae-Papilionoideae); see also <b>stipule</b>
<b>Stipule</b>	structure, often leaf-like, bract-like or thread-like, at base of petiole; e.g. <i>Irvingia smithii</i> (Irvingiaceae)
<b>Strangler</b>	growth form in the genus <i>Ficus</i> which develops from an epiphyte on a host tree to eventually cover the host
<b>Sub-</b>	almost
<b>Sub-marginal</b>	(vein) close to and parallel to the margin; e.g. <i>Ficus elasticoides</i> (Moraceae)
<b>Sub-opposite</b>	(leaves) almost but not precisely opposite
<b>Sub-sessile</b>	(leaf) almost but not completely sessile, having a 1–2 mm petiole
<b>Subulate</b>	(stipule) awl-shaped, tapering to a fine point; e.g. <i>Pauridiantha pyramidata</i> (Rubiaceae)

<b>Symmetric</b>	(e.g. leaf) with two sides which are more or less mirror-images of one another; see also <b>asymmetric</b>
<b>Terminal</b>	apical, at the end
<b>Terra firma</b>	dry land, neither permanently nor periodically inundated
<b>Tertiary</b>	(vein/venation) third order, branching off the secondary veins; see also <b>midrib, secondary</b>
<b>Tight</b>	(venation) dense, close together; see also <b>lax</b>
<b>Tooth</b>	(leaf margin) notches and projections resembling a saw blade; e.g. <i>Grossera macrantha</i> (Euphorbiaceae); see also <b>entire</b>
<b>Trifoliolate</b>	(leaf) compound, comprising three leaflets; e.g. <i>Allophylus conraui vel sp. aff.</i> (Sapindaceae)
<b>Trinerved</b>	(leaf) having at least two strong veins in addition to the midrib at base, giving the appearance of at least three equally prominent veins at base; e.g. <i>Celtis philippensis</i> (Cannabaceae)
<b>Tuft</b>	(domatia) comprising a cluster of hairs; e.g. <i>Nesogordonia kabingaensis</i> (Malvaceae); see also <b>cave, pit, pocket</b>
<b>Twig</b>	small woody branch, usually referring to the axis on which leaves are directly attached
<b>Underbark</b>	layer of slash directly beneath the dead layer in the bark
<b>Undulate</b>	(leaf margin) with large bends or waves at right-angles to the plane of the lamina; see also <b>crinkly, wavy</b>
<b>Varnished</b>	very shiny, as if with a thick shiny coating on the surface
<b>Vein</b>	conducting channel in leaf, visible as a line in the lamina
<b>Velvety</b>	densely covered with short, very soft, erect hairs
<b>Venation</b>	arrangement or pattern of veins
<b>Wavy</b>	(leaf margin) irregular or uneven, with bends or ripples in the plane of the lamina like very slight teeth; e.g. <i>Funtumia elastica</i> (Apocynaceae); see also <b>undulate</b>
<b>Whorled</b>	leaves in groups of three or more attached at the same node on a branch, usually with a fixed number at each node; e.g. <i>Rauvolfia vomitoria</i> (Apocynaceae); see also <b>clustered</b>
<b>Winged</b>	with a thin shelf of tissue alongside, often referring to rachis or petiole; e.g. petiole of <i>Guarea thompsonii</i> (Meliaceae)
<b>Woolly</b>	densely covered with long, matted or curly hairs

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