

NON-WOOD FOREST PRODUCTS

16

Rattan glossary
and
Compendium glossary
with emphasis on Africa



ISSN 1020-3370

NON-WOOD FOREST PRODUCTS

16

Rattan glossary

by
Dennis V. Johnson
FAO Consultant

and

Compendium glossary with emphasis on Africa

by
Terry C.H. Sunderland
African Rattan Research Programme
Limbe Botanic Garden
Cameroon

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

ISBN 92-5-105095-3

All rights reserved. Reproduction and dissemination of material in this information product for educational or other non-commercial purposes are authorized without any prior written permission from the copyright holders provided the source is fully acknowledged. Reproduction of material in this information product for resale or other commercial purposes is prohibited without written permission of the copyright holders. Applications for such permission should be addressed to the Chief, Publishing Management Service, Information Division, FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy or by e-mail to copyright@fao.org

© FAO 2004

CONTENTS

INTRODUCTION	1
Explanatory notes	1
GLOSSARY	2
RATTAN RESOURCES	2
Biology and systematics	2
Anatomy and morphology	7
Physiology	10
Management and plantations	11
Harvesting	13
RATTAN AS A RAW MATERIAL	15
Grading, classification and general terms	15
Post-harvest handling	21
Storage	22
Trade	22
Transport	23
PROCESSING	23
For local artisanal uses	23
Industrial level furniture manufacturing	34
TRADE	26
MISCELLANEOUS	27
VERNACULAR NAMES	29
Cross-listing: genus/species to vernacular names	40
APPENDIX I – Classification of palm family (Palmae) rattan genera	44
APPENDIX II – Rattan genera, species and geographic distribution	45
APPENDIX III – Utilized <i>Calamus</i> species	46
APPENDIX IV – Utilized <i>Daemonorops</i> species	49
APPENDIX V – Other utilized cane species	50
APPENDIX VI – Philippine standard specifications for rattan and wicker furniture	51
APPENDIX VII – A chronology of major rattan meetings	55
BIBLIOGRAPHY	57
COMPENDIUM GLOSSARY ON RATTAN TERMS IN AFRICA	61
RATTAN RESOURCES	61
Biology and systematics	61
Anatomy and morphology	62
Physiology	63
Management and plantations	63
Harvesting	64
RATTAN AS A RAW MATERIAL	64
Trade	64
Transport	65

PROCESSING	65
At local artisanal level	65
MISCELLANEOUS	65
VERNACULAR NAMES	65
The rattans of africa – summary of taxonomy and utilization	67
Cross-listing of rattan genus/species to vernacular names by country (language in parentheses)	69
Life form and intermediate folk classification of rattan canes in selected African language groups	72
Selected cane products and their nomenclature	73
Summary of the non-cane uses of African rattans	74
Currently recognized names and synonyms for African rattans	75
BIBLIOGRAPHY	77

FOREWORD

There are more than 600 species of rattans, of which only about 10 percent are traded internationally. A wide variety of terms and terminologies are used in the rattan sector worldwide, often with different meanings, or which are not well understood among the many rattan users in and among countries. An expert consultation on rattan, organized in December 2000 in Rome by FAO and the International Network for Bamboo and Rattan (INBAR) proposed a number of immediate steps to promote the sustainable use of rattan. One of the conclusions of the meeting was that there is a need to compile and clarify terms and definitions used in the management, utilization, processing and trade of rattans and their products among the many stakeholders in and among the various countries.

In follow-up, FAO contacted Dennis Johnson, a world-known palm specialist, who kindly accepted FAO's call to compile a glossary on terms, concepts and definitions related to rattan and its products. The glossary is structured according to the following major sections: rattan resources (biology, management, plantations, harvesting); rattan as a raw material (transport, storage, grading and post-harvest handling, rattan trade); rattan processing (for local artisanal uses; for industrial level furniture manufacturing); and rattan trade in raw, furniture and other products. In order to give special emphasis to the emerging rattan sector in Africa, FAO subsequently contracted Terry Sunderland, a well-known rattan specialist in Africa, who kindly prepared a separate compilation of terms specifically focusing on those used in Africa.

FAO wishes to thank the two authors for their work and is pleased to publish and disseminate this rattan glossary in support of the development of the rattan sector worldwide.

Wulf Killmann
Director
FAO Forest Products and Economics Division

ACKNOWLEDGMENTS

The Rattan Glossary

The successful completion of this glossary is due in no small measure to the cooperation and assistance of a number of individuals and their respective institutions. Paul Vantomme and Wulf Killmann of FAO generously provided guidance and direction to the overall project. Others who willingly furnished me with advice and information on various aspects of the rattan information contained herein include: Raja Barizan, Brian Belcher, Tom Evans, Fu Jinha, Domingo Madulid, Johanis Mogeia and Terry Sunderland. I am indebted to John Dransfield, Walter Liese and N. Manokaran, each of whom reviewed the manuscript and made valuable suggestions for improvement. My sincere thanks to each of those named. I accept responsibility for any remaining errors in this document.

Dennis V. Johnson

The Compendium Glossary on Rattan Terms in Africa

Particular thanks are extended to Stella Asaha and Michael Balinga for their comments and additions to an earlier draft of this document.

Terry C.H. Sunderland

INTRODUCTION

This document contains two sections. The first section is a glossary of rattan terms mostly from Southeast Asia (especially Malaysia). It is more than simply a compilation of over 500 terms and definitions relative to rattans and their utility; also included are some 425 vernacular names, and a listing of miscellaneous terms that may be encountered in the rattan literature. Seven appendixes provide information on the systematics and geographic distribution of rattans, data on reported utilization of rattans for canes and other purposes, an example of standard specifications for rattan furniture and a chronological record of technical rattan meetings since 1979, when the modern era of rattan development can be said to have begun. The bibliography includes most of the major modern publications on rattans. The second section is a compendium glossary on rattan terms with special emphasis on Africa that was compiled separately, but following the same structure as the first glossary. Although this has created some overlap with respect to terms, vernacular and botanical names, readers may find it useful also to have an overview of rattan terms by region.

EXPLANATORY NOTES

Traditionally, the New World palm genus *Desmoncus* is excluded from consideration in rattan-related documents because it is not a true rattan. However, there is strong justification for its inclusion in this glossary. All species of *Desmoncus*, with one exception, are characterized by having climbing stems, and these stems have end-uses comparable to the Old World rattans, although on a much smaller scale and generally only at the local level.

The glossary terms and definitions are organized under six major headings and twelve subheadings. Determination of which subheading to use for certain terms presented some difficulty. In such cases, the subheading with which the term is most closely associated has been used. Users are advised to consult other subheadings if the term they seek is not where they had expected to find it.

The vernacular names included are primarily from Southeast Asia, which is a reflection of the greater commercial importance of rattans in that region. To provide full coverage, a comparatively small number of common names from East Asia, South Asia, Africa and Latin America are listed.

Precautions should be taken in using vernacular names to attempt to identify rattan genera and species. Many names, especially those derived from the trade, are employed to refer to multiple species of rattan having similar physical characteristics. In certain instances, vernacular names are erroneously applied. Despite the uncertainty often associated with many of the vernacular names, they are essential to know because they are the designations used by local people in exploiting, managing and developing rattan resources.

GLOSSARY

Note: the following abbreviations are used below:

cf. - compare; e.g. - for example; i.e. - that is; q.v. - which see.

The language from which a term is derived is given in parenthesis, as appropriate.

RATTAN RESOURCES

BIOLOGY AND SYSTEMATICS

Acropetal	Referring to the maturity of rattan flowers and fruits proceeding from the base to the apex.
Adnate	United with another part; with unlike parts fused; e.g. ovary and calyx tube.
Albumen	An old term used for the endosperm.
Anatropous	An ovule bent parallel to its stalk (stem) so that the micropyle is adjacent to the hilum.
Ancistrophyllinae	The palm subtribe that includes the rattan genera <i>Eremospatha</i> , <i>Laccosperma</i> and <i>Oncocalamus</i> .
Ancistrophyllum	A synonym of the rattan genus <i>Laccosperma</i> .
Androecium	Collective term for the stamens as a unit of the flower.
Antepetalous	Opposite the petals.
Antesepalous	Opposite the sepals.
Anther	The part of a stamen containing the pollen.
Apocarpus	With free carpels.
Arecaceae	Alternate name for the family <i>Palmae</i> .
Arecoideae	The palm subfamily which includes the tribe <i>Cocoeae</i> .
Bactridinae	The palm subtribe which includes the rattan-like genus <i>Desmoncus</i> .
Basifixed	Attached to the base.
Bejaudia	A synonym of the rattan genus <i>Myrialepis</i> .
Bisexual	Having both sexes present and functional in the same flower; cf. hermaphrodite.
Bract	A modified leaf associated with the inflorescence.
Bracteole	A small bract borne (growing) on a flower stalk (stem).
Calameae	The palm tribe that includes the rattan subtribes <i>Calaminae</i> , <i>Korthalsiinae</i> and <i>Plectocomiinae</i> , as well as the non-rattan subtribes <i>Metroxyliinae</i> , <i>Pigafettinae</i> and <i>Salaccinae</i> .
Calaminae	The rattan palm subtribe that includes the rattan genera <i>Calamus</i> , <i>Calospatha</i> , <i>Ceratolobus</i> , <i>Daemonorops</i> , <i>Pogonotium</i> and <i>Retispatha</i> .
Calamoid	Referring to palms in the genus <i>Calamus</i> .

<i>Calamoideae</i>	The rattan palm subfamily that includes the rattan tribes <i>Calameae</i> and <i>Lepidocaryeae</i> , as well as the non-rattan tribe <i>Eugeissoneae</i> .
<i>Calamus</i>	A genus of rattans occurring in Southeast Asia, southern China, the western Pacific, Australia, South Asia and equatorial Africa; it consists of 370–400 species.
<i>Calospatha</i>	A genus of rattans occurring in Peninsular Malaysia; it consists of a single species.
Calyx	The outermost or lowermost whorl (circle) of floral organs, the sepals.
Campanulate	Bell-shaped.
Carpel	The single unit of the gynoecium.
Carpellate	Pertaining to the carpel.
Chalaza	The basal part of the ovule or seed where it is attached to the funiculus and the point at which vascular (vessel) tissues enter and spread into the ovule.
<i>Ceratolobus</i>	A genus of rattans occurring in Thailand, Peninsular Malaysia, Sumatra, Java and Borneo; it consists of six species.
Ciliate	Bearing a fringe of hairs.
<i>Cocoeae</i>	The palm tribe that includes the subtribe <i>Bactridinae</i> .
<i>Cornera</i>	A synonym of the rattan genus <i>Calamus</i> .
Corolla	The second whorl (circle) of flower organs (parts), the petals, inside or above the calyx.
Cucullate	Bearing a flexible hood (covering) at the tip.
<i>Cymbospatha</i>	A section of the rattan genus <i>Daemonorops</i> having the inflorescence with its bracts all included within the prophyll; correctly this should be designated as section <i>Daemonorops</i> ; cf. <i>Piptospatha</i> .
<i>Daemonorops</i>	A genus of rattans occurring in Southeast Asia and China; it consists of 115 species.
<i>Desmoncus</i>	A genus of rattan-like palms occurring in South America, Central America and Mexico; it includes about seven species.
Diaspore	Portion of the seed without sarcotesta.
Didymous	Of anthers, where the connective is almost absent.
Embryo	The rudimentary plant within a seed.
Endocarp	The innermost layer of the fruit wall; cf. epicarp, mesocarp, pericarp.
Endosperm	In palms, the nutritive body of a seed.
Epicarp	The outermost layer of the fruit wall; cf. endocarp, mesocarp, pericarp.
Epipetalous	United with and often appearing to be borne (growing) on the petals.
<i>Eremospatha</i>	A genus of rattans occurring in humid tropical Africa; it consists of 11 species.
Exine	The outer coat of a pollen grain.
Extrorse	Of anthers, opening away from the centre of the flower.
Family	A taxonomic (systematic) grouping of similar genera.

Filament	The stalk (stem) supporting the anther in the stamen.
Fruit	The ripened ovary with adnate (joined) parts.
Funiculus	The stalk (stem) attaching the ovule to the ovary wall.
Gametophyte	The pollen tube, its nuclei and the embryo sac.
Genus (plural: genera)	A taxonomic (systematic) grouping of species believed to be closely related to each other.
Gynoecium	The ovule bearing organ of the flower, consisting of an ovary, a style and one or several stigmas.
Hermaphrodite	Bisexual; in flowers, with stamens and pistil in the same flower.
Hilum	The scar left on the seed where it was attached.
Holotype	The actual specimen on which the name of a species is based; cf. isotype, syntype.
Homogeneous	Referring to the endosperm; not ruminant.
Imbricate	Overlapping such as in a flower bud when one sepal or petal is wholly external and one wholly internal and the others overlap at the edges only; cf. valvate.
Inflorescence	The branch that bears the flowers, including all its bracts and branches.
Infructescence	An inflorescence bearing fruit.
Integument	The covering of the seed, divisible into two layers, the outer of which becomes the sarcotesta.
Introrse	Of anthers, opening toward the centre of the flower.
Involucrophorum	A bract that holds both female and neuter flowers.
Isotype	A duplicate of the holotype; cf. syntype.
<i>Korthalsia</i>	A genus of rattans occurring in Southeast Asia; it consists of about 26 species.
<i>Korthalsiinae</i>	The rattan palm subtribe containing the rattan genus <i>Korthalsia</i> .
<i>Laccosperma</i>	A genus of rattans occurring in humid tropical Africa; it consists of six species.
Latrorse	Of anthers, opening lateral to the filament.
<i>Lepidocaryeae</i>	The palm subtribe that includes the rattan genera <i>Eremospatha</i> , <i>Laccosperma</i> and <i>Oncocalamus</i> .
<i>Lepidocaryoideae</i>	A synonym of the rattan palm subfamily <i>Calamoideae</i> .
Locule	The cavity in which the ovule is borne (growing).
Loricata	Covered with fruit scales, as in the Calamoid palms.
Mesocarp	The middle layer of the fruit wall; cf. endocarp, epicarp, pericarp.
Micropyle	An opening through the envelope enclosing the ovule.
<i>Myrialepis</i>	A genus of rattans occurring in Southeast Asia; it consists of a single species.
<i>Oncocalamus</i>	A genus of rattans occurring in humid tropical Africa; it consists of four species.

Ovary	The part of the pistil, usually the enlarged base, which contains the ovules and eventually becomes the fruit.
Ovate	Egg-shaped; a flat surface that is scarcely twice as long as broad with the widest portion below the middle.
Ovoid	A solid object that is ovate in section.
Ovule	The immature seeds in the ovary before fertilization.
<i>Palmae</i>	The palm family; alternate name <i>Areaceae</i> .
Partial inflorescence	The first order branch of an inflorescence and the branches it carries.
Pedicel	The stalk (stem) of an individual flower of an inflorescence.
Peduncular bracts	Empty bracts borne (growing) on the peduncle (stem) between the prophyll and the first rachis bracts.
Perianth	A collective term for sepals and petals if both are present.
Pericarp	The wall of the ripened ovary of fruit whose layers may be fused into one, or may be more divisible into exocarp, mesocarp and endocarp.
Petal	One unit of the inner floral envelope or corolla.
<i>Phyllanthectus</i>	One of the sections into which the rattan genus <i>Calamus</i> is divided; the best quality commercial cane species belong to this section and to <i>Podocephalus</i> , q.v.
<i>Piptospatha</i>	A section of the rattan genus <i>Daemonorops</i> sharing the characteristic of having inflorescence bracts that split down their length and fall off at anthesis (flowering).
Pistil	The female part of a flower (gynoecium).
Pistillate	Bearing a pistil (gynoecium), the ovule-bearing organ of the flower.
Pistillode	A sterile gynoecium.
<i>Plectocomia</i>	A genus of rattans occurring in Southeast Asia; it consists of about 16 species.
<i>Plectocomiinae</i>	The rattan palm subtribe that includes the rattan genera <i>Myrialepis</i> , <i>Plectocomia</i> and <i>Plectocomiopsis</i> .
<i>Plectocomiopsis</i>	A genus of rattans occurring in Southeast Asia; it includes five species.
<i>Podocephalus</i>	One of the sections into which the rattan genus <i>Calamus</i> is divided; the best quality commercial cane species belong to this section and to <i>Phyllanthectus</i> , q.v.
<i>Pogonotium</i>	A genus of rattans occurring in Peninsular Malaysia and Borneo; it consists of three species.
Pollen	Spores (reproductive units) borne by (growing on) the anthers containing the male element (gametophytes).
Pollination	The transfer of pollen from the dehiscing (splitting) anther to the receptive stigma.
Prophyll	The first bract borne on the inflorescence.
Protandrous	Stamens shedding pollen before the stigma is receptive.
Protogynous	Stigmas receptive before pollen is shed.

Rachilla	An ultimate flower-bearing branch of the inflorescence.
Rattan	A climbing palm belonging to the subfamily <i>Calamoideae</i> .
Receptacle	The central axis of a flower to which the floral organs are attached.
<i>Retispatha</i>	A genus of rattans occurring in Borneo; it consists of a single species.
Ruminate	Referring to the endosperm, darkly streaked due to infolding of the seed coats.
Sarcotesta	A fleshy layer developed from the outer seed coat; cf. testa.
<i>Schizospatha</i>	A synonym of the rattan genus <i>Calamus</i> .
Section	A taxonomic (systematic) grouping of species below the generic level; e.g. <i>Cymbospatha</i> , q.v.
Seed	The reproductive unit formed from a fertilized ovule.
Sepal	A single part of the outermost whorl (circle) of floral organs (parts), the calyx.
Sessile	Without a stalk, such as a stigma with no style.
Spadix	An inflorescence, which is now the preferred term.
Spathe	A large sheathing bract usually either the prophyll or peduncular bract; a term best not used.
Species	The fundamental taxonomic (systematic) unit. In palms, the most commonly applied species concept that is applied to palm taxonomy is the morphological species concept where discontinuities in morphological variation provide the means to separate species.
Stamen	The male organ of a flower; a filament (stem) bearing an anther containing pollen.
Staminate	A flower bearing stamens but no pistils.
Staminode	An abortive or rudimentary stamen without a perfect anther.
Sterile	Failing to complete fertilization and produce seed as a result of defective pollen or ovules; not producing seed capable of germination; lacking functional sexual organs.
Stigma	The portion of the pistil that receives the pollen.
Style	The part of the pistil connecting the ovary with the stigma.
Subfamily	A major taxonomic (systematic) division of a family.
Subtribe	A taxonomic (systematic) division of a tribe.
Syntype	One of several different specimens cited in the first description of a species where no single specimen was designated as the type.
Testa	The outer coat of the seed; cf. sarcotesta.
Triad	A special group of two lateral staminate and a central pistillate flower.
Tribe	A taxonomic (systematic) division of a subfamily.
Triovulate	A gynoeceium with three ovules, one in the locule of each carpel.
Unisexual	Referring to flowers of one sex; i.e. bearing fertile stamens alone or bearing a fertile pistil alone.

Valvate	Meeting exactly without overlapping; cf. imbricate.
Variety	A taxonomic (systematic) division of a species.

ANATOMY AND MORPHOLOGY

Abaxial	The side of an organ that faces away from the axis that bears it; e.g. the under surface of a leaf; cf. adaxial.
Abscission	Separation; e.g. detachment of a leaf from a stem.
Acanthophyll	A spine, often large, derived from a leaflet.
Acaulescent	Lacking a visible stem; stemless.
Acuminate	Tapering to a point with concave sides; cf. acute.
Acute	Sharp; ending in a point with straight or slightly convex sides; cf. acuminate.
Adaxial	The side of an organ that faces toward the axis the bears it; e.g. the upper side of a leaf; cf. abaxial.
Adventitious	Not in the usual place; e.g. roots on stems.
Ansa	The stalk of a leaflet (in <i>Korthalsia</i> only).
Ansate	Bearing an ansa.
Apex	The growing point of a stem or root.
Apical	At the point of any structure.
Apiculate	Bearing a short, sharp but not stiff point.
Armed	Bearing some form of spines.
Auricle	An ear-like extension of the leaf sheath, usually paired, one on each side of the petiole.
Axil	The upper angle between the leaf and the stem.
Axillary	Borne (growing) in an axil.
Axis	The main or central line of development of a plant or organ.
Bifid	Divided in two, usually equal, parts.
Blade	The extended part of a leaf or petal.
Bristle	A stiff hair.
Caespitose	Clustered, having multiple stems; cf. solitary.
Central cylinder or corpus	Inner to the stem cortex; comprised of scattered vascular bundles embedded in thin-walled parenchymatous ground tissue.
Cirrate	Bearing a cirrus, q.v.
Cirrus	An extension of the rattan leaf tip armed with grapnel hooks, enabling the rattan to climb into the forest canopy; cf. flagellum.
Clustered	Caespitose; having multiple stems; cf. solitary.
Concolorous	Upper leaflet surface the same colour as the lower; cf. discolorous.
Connate	United or joined.
Connective	The part of the stamen that connects the anther cells to the filament.

Coriaceous	Leathery.
Cortex	The ground tissue of the stem between the vascular cylinder and the epidermis.
Cotyledon	Single seed leaf in palms, part of the embryo.
Crown	The cluster of leaves borne at the tip of the stem.
Culm	A rattan stem or stalk; the term is also applied to the bamboo stem.
Dimorphic	Of two forms, as may occur with branches, etc.
Discolorous	Upper leaflet surface different in colour from the lower; cf. concolorous.
Distal	Situated farthest from the point of attachment.
Distichous	Regularly arranged in two opposite rows on either side of a stem.
Dyad	A pair.
Ecirrate	Without a cirrus, q.v.
Eflagellate	Without a flagellum, q.v.
Entire	An even margin without tooth-like or lobed (rounded) edges.
Eophyll	In a seedling, the first leaf having a blade.
Epidermis	The outermost layer of the rattan stem (the skin) consisting of a single row of mostly radially elongated cells.
Fibre	A relatively long sclerenchyma cell.
Fibre sheath	In the stem, the heavily lignified and thick-walled fibres mainly surrounding the vascular bundles.
Flagellate	Bearing a flagellum, q.v.
Flagellum	A whiplike climbing organ derived from an inflorescence and bearing reflexed spines; cf. cirrus.
Grapnel	A small anchor or hook with three or more flukes (barbed heads) used for the spine groups borne (growing) on the flagellum or cirrus.
Ground tissue	Parenchyma cells between the vascular bundles of the rattan stem.
Hypodermis	One or two layers of unlignified cells lying just below the epidermis of a rattan stem.
Indument	Any covering as hairs or scales.
Induplicate	Leaflets V-shaped in cross section; cf. reduplicate.
Internode	The space or part of a stem or branch between the attachments of two leaves; also referred to as a joint.
Joint	Common name for an internode.
Knee	A swelling on the leaf sheath at the base of the petiole, present in most rattans.
Lamina	The usually flattened bladelike portion of a leaf, as distinct from the leaf base and petiole.
Lanceolate	Narrow, tapering at both ends, the basal end often broader.
Leaflet	One part of a compound (having 2 or more leaflets) leaf.

Linear	Several times longer than wide, usually narrow.
Meristem	The apical growing point of the stem which is an area of active cell division.
Metaxylem vessels	In the stem, elongated cells forming the main part of the xylem; they transport water and appear round in cross-section.
Midrib	The main vein of a leaf which is a continuation of the petiole.
Nerve	A strand of strengthening and/or conducting tissue running through a leaf, which starts from the midrib and diverges or branches throughout the leaf.
Node	The point on the stem or branch at which a leaf or lateral is borne (growing).
Ocrea	An extension of the leaf sheath beyond the petiole insertion.
Paraxylem	In the stem, small vessels located in the para-position (alongside) of the xylem.
Parenchyma	Storage tissue in the rattan stem.
Peduncle	The lower unbranched part of an inflorescence.
Pendulous	Drooping; hanging down.
Periphery	The portion of the rattan stem consisting of the epidermis and a peripheral zone below.
Petiolate	Having a petiole, q.v.
Petiole	The stalk (stem) of a leaf.
Phloem	The cell system for transporting sugars and nutrients through the rattan stem; cf. vascular bundles.
Pinna (plural: pinnae)	Leaflet of a pinnate leaf.
Pinnate	Featherlike, lateral ribs or leaflets arising from a central axis.
Praemorse	Jaggedly toothed; referring to the jagged leaflet margins of <i>Korthalsia</i> , <i>Eremospatha</i> spp. and some species of <i>Ceratolobus</i> .
Rachis	The axis of a leaf beyond the petiole; or the axis of an inflorescence beyond the peduncle.
Radicle	The first root formed by the embryo.
Recurved	Bent or curved downward or backward.
Reduplicate	Leaflets A-shaped in cross-section; cf. induplicate.
Rhizome	An underground stem that is distinguished from the adjoining roots by the presence of nodes with buds and leaves or scales.
Rhomboid	Diamond-shaped; term used to describe leaflets.
Scandant	Climbing.
Sclerenchyma	In the stem, heavily lignified cells with thick walls that ensheath the vascular bundles, q.v.
Sheath	Basal part of the leaf that is usually tubular, but often splits.
Shoot	A young growing stem.

Silica	In the stem, silicon dioxide (SiO ₂) occurs as isolated spherical bodies in unequally thickened cells (stegmata), characteristically disposed next to vascular and non-vascular fibre.
Solitary	Single stemmed, not clustering, q.v.
Spine	A short stiff straight sharp-pointed hard structure; armed, q.v.
Spinule	A very small spine.
Stegmata	Silica cells (bodies) present in the rattan stem as longitudinal files of cells adjacent to vascular or non-vascular fibre.
Stem	The part of the plant that is usually above ground and bears the branches, leaves and reproductive parts.
Stemless	Referring to rattans with very short, often subterranean stems; cf. acaulescent.
Stolon	A trailing stem usually above ground capable of producing roots and shoots at its nodes.
Stomata	Pores in the epidermis of aerial parts of the rattan plant.
Subcirrate	A type of leaf in which the terminal portion of the rachis bears very small widely separated leaflets, but does not develop into a true cirrus.
Sucker	A branch formed at the base of a rattan stem.
Sympodial	Of a stem in which the growing point either terminates in an inflorescence or dies, growth being continued by a subtending lateral growing point.
Terrete	Smooth, cylindrical and tapering.
Tomentum	A thick covering of hairs.
Unarmed	Without any spines.
Vascular bundles	Strands of phloem and xylem cells embedded in parenchymatous cells and sheathed by sclerenchyma cells.
Vein	A strand of vascular tissue in a flat organ such as a leaf.
Venation	The arrangement of the veins of a leaf.
Verrucate	Bearing broad, rather large, isodiametric excrescences (growths).
Verticillate	Arranged in whorls (circles) as in the spines on the stems of some <i>Calamus</i> species.
Whip	A climbing organ in some rattans; general term for <i>cirrus</i> and <i>flagellum</i> .
Xylem	The cell system transporting water through the rattan stem; cf. vascular bundles.
Yellow cap	Strands of non-lignified fibres, normally yellow in colour and not taking up stain, surrounded with large numbers of stegmata, found in species of <i>Korthalsia</i> , <i>Plectocomia</i> and <i>Plectocomiopsis</i> .

PHYSIOLOGY

Adjacent-ligular	Type of germination in which the seedling shoot develops close to the seed.
Anthesis	The time when pollination takes place.
Apogeotropic	Growing upwards; cf. geotropic.

Dioecious	When female (staminate) and male (pistillate) flowers are borne (growing) on different plants; cf. monoecious.
Geotropic	Growing downward; cf. apogeotropic.
Gibberellic acid	A growth-promoting hormone which has shown positive effects on rattan seedlings.
Hapaxanthic	Describing shoots flowering then dying; cf. pleonanthic.
Hypostomatous	Stomata confined to the abaxial surface of the leaf.
Lignified	Impregnated with lignin, the major chemical constituent of wood; i.e. woody.
Monocarpic	Bearing fruit only once in its lifetime; cf. polycarpic.
Monoecious	When female (staminate) and male (pistillate) flowers are borne (grow) on the same plant; cf. dioecious.
Phenology	The study of the behaviour of plants in relation to environmental conditions. The major objective of phenological studies of rattans is to determine flowering and fruiting patterns.
Phyllotaxy	The arrangement of leaves on a stem.
Pleonanthic	Describing shoots flowering continuously, not dying after flowering; cf. hapaxanthic.
Polycarpic	Flowering over many years; cf. monocarpic.
RLI	Relative Light Intensity, a standard measure of light intensity expressed as 1-100%. RLI is used to study rattan seed germination and growth in natural forests and nurseries.
Root to shoot ratio	A measure of the differential sensitivity of roots and shoots to water stress. Rattan root growth is less sensitive than shoot growth hence there are large increases in the ratio under conditions of water stress.

MANAGEMENT AND PLANTATIONS

Agroforestry	A land-use system based on some combination of cultivated annual and perennial plants, natural forest and livestock, such that total production per unit area is maximized and risk minimized.
Assisted natural regeneration	A term used interchangeably with enrichment planting.
Belukar (Malay)	Young secondary forest.
Bungor	A support tree (<i>Lagerstroemia speciosa</i>) planted for cultivation of small-diameter canes in Kalimantan.
Cluster sampling	A technique that can be used to inventory rattans in virgin or secondary forest; a grid of the area to be surveyed is constructed and randomly selected clusters assessed in the field for the quantity and size-class of rattan species present.
Enrichment planting	Cultivation of a desirable rattan species within its native forest habitat to increase populations, using nursery stock or wildings; examples are group planting, line planting and strip planting.
Establishment stage	The initial growth period of a seedling derived from direct seeding or transplanting; critical factors are light, moisture and nutrients.

Forest plantations	Cultivation of different tree species underplanted with rattan.
Group planting	Rattan seedlings of large-diameter species planted with multiple seedlings per planting point, typically at least 1 m apart; some tree thinning is done to improve light conditions for seedling growth.
Hardening off	Removal of rattan seedlings from the nursery into direct sunlight a few days or a week before transplanting.
Intercropping	Cultivation of two or more perennial or annual species in rows or other complementary patterns such that production is maximized per unit area.
<i>Kampung</i> (Malay)	A cluster of houses and associated gardens; a compound.
<i>Ladang</i> (Malay)	Cultivated field; sometimes the site of rattan gardens.
Line planting	Rattan seedlings of large-diameter species planted singly per planting point along a planting line within a forest; some tree thinning is done to improve light conditions for seedling growth. Line planting is especially suitable in belukar or regenerating forest.
Lining	The marking of planting rows and planting points prior to transplanting rattan seedlings.
Plantation owner/operator	This term includes private tree plantation companies, village farmers and individuals under contract for reforestation programs.
Planting materials	Seeds, wildings, suckers or tissue cultured material for rattan propagation.
Polybag nursery	Germination of rattan seed in polythene bags filled with fertile topsoil.
Processed seed	Rattan seed from which the fruit scales (pericarp) and the fleshy sarcotesta are removed before sowing.
Pruning	Maintenance of young rattan plants by cutting of dried rattan leaves to allow better passage of workers and peeling off dried brittle leaf sheaths to discourage breeding of long horn beetles.
Raised seed bed	A bed for germinating seed which is elevated 10–13 cm above the ground and surrounded by boards to maintain the height.
Ramet	A sprout from a clustering rattan that may be separated and used for propagation.
Rattan garden	A shifting cultivation plot converted into growing rattans once food production has ceased and secondary succession is taking place.
Rattan stock	An inventory of the rattan populations in a given forest area, commonly to determine the density of commercial species by diameter classes.
Replacement or supply planting	The replacement of dead or unhealthy rattan seedlings.
Rosette stage	Said of rattan seedlings when the seedling leaves are fully expanded, at which time they may be transplanted.
Selective felling and cutting	Removal of forest canopy in an area of enrichment planting to allow sufficient light to reach transplanted rattan seedlings.
Shade/Support trees	Naturally-occurring or cultivated trees providing support and shade for cultivated rattans.
Shifting cultivation or swidden agriculture	A traditional food cropping system on forest lands; rattan planting of small-diameter species has been incorporated into the system in Borneo.

Stem training	Assisting the first (or mother) rattan stem to gain tree support as early as possible.
Strip planting	Strips of forest are cleared and an optimum of two planting lines of rattan seedlings established per strip; strip planting is recommended in old secondary forest.
Strip sampling	A technique that can be used to inventory rattans in virgin or secondary forest; predetermined strips, 10 m or more in width and a sampling intensity of 20–25 percent can provide an adequate measure of rattan stock.
Sunscorch	Scorching of rattan seedling leaves because of excessive sunlight; it can result in seedling death.
Swidden	Shifting cultivation, q.v.
Thinning	In multiple-stemmed rattan species, reduction of the number of stems within the clump to allow remaining stems to grow more vigorously.
Transplanting	Removal of wildings or nursery seedlings from their original location to a planting site in the forest.
Underbrushing	Slashing of all undergrowth as close to the ground as possible to prepare for enrichment planting or group planting of rattan seedlings.
Underplanting	Planting any desirable economic species such as rattan beneath the forest canopy.
Vegetative propagation	Propagation of rattan by suckers, whole rhizomes and by tissue culture.
Wilding	a self-sown seedling collected from the wild for planting.

HARVESTING

Bundling	Gathering and tying cut lengths of canes into bundles for transport to a collection point. About 10 large-diameter canes make up a bundle; small-diameter canes are doubled over and bundled, the number of pieces being determined by the cane diameter. A typical bundle of canes weighs about 60 kg.
Coiling	Forming slender canes into coils for transport from the forest, rather than cutting them into lengths.
Collecting permit	Legal authorization issued to individuals, cooperatives or companies to harvest wild rattans in a defined area for a specified period of time; cf. royalty.
Collectors	Local people, often forest-dwellers, who harvest wild canes.
Cross-cutting	Cutting harvested canes into desired lengths; large-diameter canes are usually cut into 3 m lengths; small-diameter canes into 9 m lengths.
Cutting cycle	The interval between harvests of wild or cultivated canes to allow them to regenerate naturally; a 5–12 year cycle is suggested, varying in accordance with species.
Dragging	cf. pulling.
Felling	Severing the rattan cane near the base with a parang.
Freeing	If a cut rattan stem cannot be pulled free manually from the ground, it is necessary to cut branches or trees from the canopy to release the cane.

Fungicide application	In the Philippines, rattan harvesters carry fungicide in a plastic container and dip the ends of rattans in the solution immediately after they are cut into lengths; this is a desirable practice and should be done if possible.
Hauling	Transport of bundles of canes from the cutting site to a collection point.
Lopping	Cutting away the soft useless uppermost 2–3 m of the rattan stem.
Mature stems	Distinguished from immature ones by the following criteria: <ul style="list-style-type: none"> (a) exposed stem or leaf-sheath brownish, dry and brittle, (b) spines blackish, (c) leaves dry or yellowish green, (d) stem with leaf-sheath bright yellow in colour, (e) average stem length above 24 m (not applicable to all species).
Orang Asli (Malay)	Aboriginal people of Malaysia who traditionally engage in rattan harvesting.
Parang (Malay)	A broad slightly curved knife, sharpened on the incurved portion, used to cut rattans off at the base; also known as a <i>machete</i> .
Picul	A Malaysian unit of measure equal to 60 kg; it is a common weight designation for a bundle of small-diameter canes ready for transport from the forest.
Pole	a general term applied to cut lengths of rattan canes.
Pulling or dragging	The practice of dislodging a whole cut rattan cane from the forest canopy by manually tugging on the severed end; some mechanical means of pulling have been employed.
Royalty	A payment made to the landowner, in the case of rattan most commonly the government, for the right to harvest canes; the royalty amount is determined by the cane type and quantity harvested; cf. collecting permit.
Selective felling	In India, rules adopted for the extraction of canes: <ul style="list-style-type: none"> (a) only mature canes should be removed from a clump, leaving undisturbed and undamaged the immature or tender canes, (b) digging of rhizomes or roots is prohibited, (c) canes shall not be extracted from outside the specified harvest blocks, (d) all one-year-old culms and six culms of the second year shall be left in a clump, (e) clumps consisting of less than six culms will not be harvested, (f) felling should be done as near the base as possible.
Sorting	The selection in the field of rattans acceptable in the trade, often done when cutting lengths and prior to bundling.
Trifore and lier	A mechanical process for pulling rattans, consisting of the trifore, which is a unit consisting of a pulley and tackle and the lier or winch, consisting of a drum where the rattan is pulled and coiled. The process is probably suitable only for small-diameter canes.

RATTAN AS A RAW MATERIAL

GRADING, CLASSIFICATION AND GENERAL TERMS

Bend	A cane defect; a deviation from straightness as measured by the chord that the curvature makes between the extreme edges of deviation and by the depth at the middle portion.
Bending tolerance	Refers to the smallest circle that can be made with a rattan cane without any splitting or cracking.
Bleached rattan	Canes lightened in colour by chemical agents to improve surface brightness.
Blemish	A cane defect; any feature marring the surface appearance of a cane; e.g. fungal blemishes. Whether a particular feature is classed as a blemish depends upon the relevant grading rule and on the end-use of the cane.
Bondot	Term used in Indonesia for unpeeled small-diameter canes applied to rattan furniture frames.
Break	A cane defect; a separation of fibres extending through a cane from one surface to the other, usually perpendicular to the direction of the grain.
Bruise	A cane defect; an injury on the cane surface caused by harvesting operations or improper processing.
Cane	Any piece or stem of round rattan, of any diameter; the term may also be used to refer to pieces of bamboo.
Cane webbing	Chair cane that has been machine-woven into a coarse fabric that is used for chair seats and backs.
Chair cane	Finely split rattan used to weave chair backs, seats etc.
Check	A cane defect; a longitudinal fissure indicating separation of fibres along the cane length, but not extending through the piece from one surface to another.
China peel	Term used in Indonesia for rattan peel or skin.
Core	The central part of the rattan cane after the removal of skin, usually marketed as strips of uniform diameter, often called “wicker”.
Cured rattan or canes	Green rattan that has undergone boiling, washing and scrubbing; also called <i>partially processed cane</i> .
Defect	An abnormality or irregularity in cane which lowers its technical quality or commercial value by decreasing strength or adversely affecting its appearance and use; cf. permissible defects; prohibited defects.
Density	Relationship of weight of rattan over volume at a given moisture content, expressed in g/cm ³ or kg/m ³ .
Diameter class	a method of classification of rattan canes; in grading, diameter is measured in the mid-internode of the small end; cf. large-diameter rattans, small-diameter rattans, split rattan canes.
Dimensional specifications for split rattan	Grading based upon: (a) length, q.v. (b) diameter class, q.v. (c) width, q.v. (d) thickness, q.v.

Dimensional specifications for unsplit large-diameter canes Grading based upon: (a) length, q.v. (b) diameter class, q.v. (c) taper, q.v. (d) internodal length, q.v.

Dimensional specifications for unsplit small-diameter canes Grading based upon: (a) length, q.v. (b) diameter class, q.v. (c) taper, q.v. (d) internodal length, q.v.

End-use class Categories of end-uses recognized for assessing utilization potential of a particular grade: (a) furniture frames, (b) furniture seats/backs, (c) walking sticks, umbrella handles, sporting goods, etc.; (d) handicrafts/novelty items; (e) baskets.

Flat core Material derived from split cores or canes with flat surfaces on both sides; also referred to as ropes and binds; cf. flat oval core, hollow oval core.

Flat oval core Material derived from split cores or canes 2–10 mm in width, with one concave and one flat surface. This material is normally used for weaving and binding; cf. flat core, hollow oval core.

Fumigated rattan Canes which have been exposed to sulphur dioxide fumes to improve their surface appearance and kill any organisms in the cane.

General requirements of entire (unsplit) large-diameter processed canes

- (a) Canes shall have authentic identity when the species is specified by the buyer.
- (b) Canes shall be straight, round, mature and seasoned.
- (c) Canes shall not break or develop checks and other defects in bending or any other processing stage.
- (d) Canes shall be either oil-cured or chemically treated with anti-staining fungicide, bleached or fumigated as specified by the buyer.
- (e) Plugging or covering of visible defects is not permitted in any form.

General requirements of entire (unsplit) small-diameter processed canes

- (a) Canes shall have authentic botanical identity when specified by the buyer.
- (b) Canes shall be mature and seasoned.
- (c) Canes shall not break on bending or in any other processing stage.
- (d) Canes shall be either oil-cured or chemically treated with anti-staining fungicide, bleached or fumigated as specified by the buyer.
- (e) plugging or covering of visible defects is not permitted in any form.

General requirements of split rattans (cane derivatives)

- (a) Cane derivatives shall be obtained from mature and seasoned canes and be pliable.
- (b) Split rattan shall be derived from canes which are either oil-cured, fumigated, bleached or chemically treated with anti-staining fungicides as specified by the buyer.
- (c) Plugging or covering of visible defects is not permitted in any form. The surface shall be smooth.
- (d) Diameter of round cores or width of flat and oval cores and peels shall be uniform throughout the length.

Grading of large-diameter processed canes

Four standardized grades are proposed by Bhat (1996):

Grade	Specifications
Super quality	Entirely (100% of specified length), free from defects. Ivory- white, cream or yellowish in colour. Uniformly bright or lustrous surfaces. Internodal length >100 mm.
I	Extent of permissible defects not exceeding 15% of the specified length. Ivory-white, cream or yellowish in colour. Uniformly bright surfaces. Internodal length >100 mm.
II	Extent of permissible defects not exceeding 50% of the specified length. Ivory-white, cream or brownish in colour. Internodal length >100 mm.
III	Extent of permissible defects not exceeding 75% of the specified length. Whitish, yellowish, brown or dark brown in colour. Internodal length >50 mm.

Grading of rattan cores

Three standardized grades are proposed by Bhat (1996):

Grade	Specifications
I	Whitish in colour. Hard and not easily broken. No or few defects.
II	White to yellowish in colour. Hard. Less than 15% of surfaces defective.
III	Brownish to reddish in colour. Soft. More than 15% of surfaces defective.

Grading of ropes and binds

Three standardized grades are proposed by Bhat (1996):

Grade	Specifications
I	Yellowish white in colour. Hard and pliable. No or few defective surfaces.
II	Creamy in colour. Intermediate hardness. Less than 25% of surfaces defective.
III	Brownish in colour. Soft and easily broken. More than 25% of surfaces defective.

Grading of small-diameter processed canes

Four standardized grades are proposed by Bhat (1996):

Grade	Specifications
Super quality	Entirely, 100% of standard length. Free from defects. Ivory- white, cream or yellowish in colour. Uniformly bright or lustrous. Easily pliable. Internodal length >100 mm.
I	Extent of permissible defects not exceeding 15% of the specified length. Ivory-white, cream or yellowish in colour. Easily pliable. Internodal length >100 mm.
II	Extent of permissible defects not exceeding 50% of the specified length. Ivory-white, cream or brownish in colour. Internodal length >100 mm.
III	Extent of permissible defects not exceeding 50% of the specified length. Whitish, yellowish, brown or dark brown in colour. Internodal length >50 mm.

Grading of split rattans

Two standardized grades are proposed by Bhat (1996):

Grade	Criteria
I	Free from defects and whitish in colour.
II	Extent of permissible defects (q.v.). Not to exceed 15% of standard length (q.v.). White, yellowish or brown in colour.

Green rattans or canes Raw, freshly cut rattans which have not undergone any treatment.

Hagkal peel Term used in Philippines for rattan peel or skin.

Hardness In grading raw canes, three categories are recognized:

- hard rattan: when bent by hand and released, it springs back and regains its original form quickly;
- moderately hard rattan: when bent by hand and released, regains its original form rather slowly and not fully;
- soft rattan: when bent, it cracks at the end or breaks, and if the bent rattan is released before it cracks or breaks, it regains its original form completely.

Hole A cane defect; a cavity caused by worms, insects or mechanical means.

Hollow oval core Material derived from split cores or canes with both surfaces curved in parallel; i.e. concave and convex; cf. flat core, flat oval core.

Internodal length In cane grading, a measure of the shortest distance from one node to another expressed in mm. The minimum length is 50 mm for grading large- and small-diameter canes.

Large-diameter rattans	A class of unsplit canes 18-40> mm in diameter; cf. small-diameter rattans. In trade the following large-diameter classes may be used: > 40 mm, 35–40 mm, 30–35 mm, 25–30 mm, 20–25 mm and 18–20 mm.
Length	In grading, the shortest distance in meters from one extreme end of a cane (large or small diameter and split rattans) to the other, usually rounded off to the nearest lower 0.05 m. Length is specified by the buyer.
Loonty	Term used in Indonesia for small-diameter canes used to weave rattan mats; cf. lampit, tatami.
Lustrous cane	Canes in which the surface is bright and exhibits a sheen or glossiness.
Mature cane	The part of a stem which has attained full structural development and does not show any deformation or fracture during drying and bending.
MOE	Modules of elasticity; a mechanical test of rattan cane strength.
MOR	Modules of rupture; a mechanical test of rattan cane strength; cf. strength class.
Natural cane	Green or cured rattan in natural form; i.e. with skin.
Oil-cured rattan	Green canes that have been cured in hot oil to impart desired surface colour and appearance, and to prevent biological degradation.
Palembang	Term used in Philippines for unpeeled small-diameter canes applied to rattan furniture frames.
Partially processed cane	Cured rattan, q.v.
Peel	Rattan peel, q.v.
Peeled cane	Rattan canes in which the skin has been removed.
Permissible defects	In cane grading, defects such as blemishes, scars, pin holes, checks and bruises are permissible to the extent specified for a particular grade; cf. grading rules for large-diameter canes, grading rules for small-diameter canes, grading rules for split rattan (cane derivatives).
Pole	General term for a length of rattan; the term may also be used to refer to a piece of bamboo.
Polished cane	Peeled cane which has undergone polishing (sanding).
Prohibited defects	In cane grading, defects such as decay, pin and worm holes, breakage and shakes.
Rattan	From <i>rotan</i> (Malay), reed, cane or stick.
Rattan derivatives	Products or parts of cane resulting from rattan conversion; i.e. splitting and peeling; cf. split rattan.
Rattan peel	Flat or semicircular material 2–10 mm in width obtained from the peripheral portion of the cane including the skin, normally used for weaving and binding; cf. flat oval core. Also called “ <i>rattan skin</i> ”.
Rattan pole	Round rattan, green or treated, of any convenient length.
Rattan waste	Remnants of rattan, either in strips, splinters or slivers resulting from processing; or in cylindrical shape with less than 50 mm in length.
Rattan wool	Fine waste produced from splitting and coring; unsuitable for any use except as stuffing or packing material.

Raw cane	Freshly cut rattans that have not undergone any treatment; also called <i>green rattan</i> .
Reed	Synonym for (rattan) core, q.v.
Ropes and binds	Material derived from splitting rattans, which has been sized and thinned; used for weaving and binding purposes.
Rough cores	A by-product of split rattans, which has undergone further splitting.
Round core	Round material consisting of the cores of rattan stems, 2–10 mm in diameter, obtained by peeling and splitting, normally used for basket frames.
Round rods	Scraped poles, q.v.
Scar	A cane defect; a depression or any marking on the surface other than fungal discoloration.
Scraped poles	Canes from which the rattan skin has been removed either by scraping or by a round-rod making machine.
Seasoned rattan	Canes whose moisture content has been reduced to a maximum level under more or less controlled drying processes.
Shake	A cane defect; a partial or complete separation between adjoining layers of tissues, as seen in end surfaces, caused by stresses developed in cutting and collecting, or in unequal drying of immature stems.
Small-diameter rattans	A class of unsplit canes below 18 mm in diameter; cf. large-diameter canes. In trade the following small-diameter classes may be used: 2–6 mm; >6–11 mm and >11–17 mm.
Split rattan	By-products of the splitting process, such as ropes, binds and cores; cf. rattan derivatives. In grading, the diameter of round cores is 2–10 mm with a tolerance of 0.5 mm.
Square core	Rattan split with a square end shape.
Sticks	Term referring to larger-diameter rattans collected and sold as straight lengths in Indonesia.
Strand cane	Synonym for chair cane, q.v.
Strength class	A classification of unsplit rattan canes into three classes: (a) strong to very strong: static bending MOR and/or tensile strength UTS above 70 N/mm ² ; (b) moderately strong: MOR or UTS 45–70 N/mm ² ; (c) weak: MOR or UTS below 45 N/mm ² .
Taper	In cane grading, a measure determined by the difference between diameters measured at the two extreme ends of a cane. In large-diameter canes, the maximum taper should not exceed 5 mm for a length of 3.5 m; in small-diameter canes, the maximum taper should not exceed 3 mm for a length of 4.5 m.
Tensile strength	The greatest longitudinal stress a rattan cane can bear without tearing apart, expressed as N/mm ² . Tensile strength decreases when strong bleaching agents are used and long bleaching periods are applied.
Thickness	In grading split rattans, thickness of flat or oval cores is 1–6 mm.
Treated rattan	Canes that have been treated with chemicals to prevent biological degradation.

Unsplit rattan or canes	Round canes, scarped or unscarped, that have not been peeled or split.
Utility class	A simplified method to classify cut canes on the basis of stem diameter groups when information as to the species of the canes is unknown.
UTS	Ultimate tensile stress, a mechanical test of rattan cane strength; strength class, q.v.
Water sega	Term used in Indonesia for small-diameter canes to weave rattan mats; of lesser quality than loonty, q.v.
Width	In grading split rattan canes, the width of flat or oval core and peels is 2–10 mm; flat/oval core, q.v.
Zambales peel	Term used in Philippines for rattan peel or skin.

POST-HARVEST HANDLING

Artificial drying	The use of a closed, heated chamber to reduce the moisture content of deglazed and washed canes. Artificial drying has been successful but is not often used.
Bleaching	Immersion of canes in a chemical solution to remove or reduce blemishes; sodium hypochlorite (1 percent solution for about 1 hour) or hydrogen peroxide are used.
Cooking	General term for boiling raw canes in hot oil; curing q.v.
Curing	Immersion of canes in a hot oil mixture (diesel, kerosine or coconut oil at 100–250 °C for 10 minutes or more) to prevent deterioration. This should be done within 1–2 days of harvesting and is said to make the canes durable by removing gums, resins and water, and denaturation of starch.
Deglazing	The first step following harvesting consisting of the removal of the spiny leaf sheaths adhering to the stem and the silicified epidermis. Various procedures are employed: wrapping the rattan around a tree trunk and rubbing it back and forth; rubbing the stem with sand or some other abrasive material; striking the cane with a piece of plaited wood; or cutting with a parang.
Drying	Reduction of the water content of cured and scrubbed canes. Typically canes are dried in the sun; placed upright against wooden frames or bundled and loosely tied at one end and stood upright with the untied basal ends spread out to form a cone. Drying time can vary from 1–3 weeks, depending upon the cane diameter and weather conditions.
End-racking	Open-air drying of oil cured and cleaned rattans by leaning them on wooden frames.
Fumigation	Exposing dried canes to sulphur dioxide to kill insects and their larvae and to give a greater uniformity of colour; usually only good quality large-diameter canes undergo the process.
Layang (Malay)	Term in Peninsular Malaysia for curing of <i>Calamus manan</i> . The raw rattans are soaked for some time in diesel oil, then bundled and heated slowly over a fire during which the surfaces are rubbed with coconut or diesel oil to remove any gummy materials. The process also reduces the content of the canes. Layang achieves a very even colour and glossy texture, enhancing the quality of the cane.
Oil-curing	Term used as a synonym for <i>curing</i> , q.v.

Primary processing A collective term that generally includes curing, scrubbing, drying, and fumigating (if applicable) of canes.

Runti or lunti (Malay) Deglazing, q.v.

Scraping Removal of the nodes and rinds of fresh canes along with the siliceous epidermis to hasten drying and to minimize staining fungal growth; scraping can be done manually with a knife or sharp-edged tool or mechanically.

Scrubbing or rinsing Cleaning cured canes using sawdust or gunny sacking to remove oil from the surface.

Sorting After primary processing canes may be sorted by diameter and other criteria and bundled again for storage.

STORAGE

Godown (Malay) A warehouse; the term is used in reference to rattan storage.

Underwater storage Submergence of small-diameter canes in water before undergoing primary processing; the anaerobic conditions prevent deterioration and attack by organisms.

Warehousing After primary processing, bundled canes are stored horizontally on racks and kept in a covered warehouse until sold.

TRADE

Ayer (Malay) One of four main groups of cane in trade, according to Burkill (1966); this group includes non-siliceous canes not included elsewhere; cf. lunti, sega, sticks.

Bet (Hindi) A general term used in India to refer to rattan of any type; the name probably originated from the Sanskrit word *betas*, meaning climber.

Demere (Twi) Trade name for *Calamus deerratus* canes in Ghana.

Lunti (Malay) One of four main groups of cane in trade, according to Burkill (1966); this group includes the same kinds as sega (q.v.) except that the silica layer has been removed; cf. ayer, sticks.

Makak Trade name for *Laccosperma secundiflorum* & *L. robustum* canes in West Africa.

Palasan (Tagalog) Philippine trade name group that includes true palasan (*Calamus merrillii*) and other canes with a diameter over 2.5 cm and internodes of 25 cm or more; cf. panlis, sika and tumalin.

Panlis (Tagalog) Philippine trade name group for canes with a diameter of less than 1.5 cm, but which are rather light in colour and therefore not included in the sika group, q.v.; cf. palasan and tumalin.

Rotan manau (Malay) Trade name for *Calamus manan* canes in Southeast Asia.

Rotan merah (Malay) Trade name for *Korthalsia* spp. canes in Southeast Asia.

Rotan sega (Malay) Trade name for *Calamus caesius* canes in Southeast Asia.

Rotan semambu (Malay) Trade name for *Calamus scipionum* canes in Southeast Asia.

Samarinda East Kalimantan river port important in the rattan trade.

- Sega** (Malay) One of four main groups of cane in trade, according to Burkill (1966); this group includes all canes with a siliceous outer layer that cracks and springs off when the cane is bent; cf. ayer, lunti, sticks.
- Sika** (Tagalog) Philippine trade name group that includes Palawan sika (*Calamus caesius*) and other rattan species that are glossy, flexible, bright yellow when dry and less than 1.5 cm in diameter; cf. palasan, panlis and tumalin.
- Sticks** One of four main groups of cane in trade, according to Burkill (1966); this group includes canes which are straight and stiff and suitable for walking sticks and furniture frames; cf. ayer, lunti, sega.
- Tumalin or tumalim** (Tagalog) Philippine trade name group that includes true tumalin (*Calamus mindorensis*) and other rattan species with a diameter of 1.5–2.5 cm; cf. palasan, panlis and sika.

TRANSPORT

- Animal power** The use of buffalo, horses or elephants to carry (or drag) bundles of rattan from the cutting sites to a forest road collection point or waterway.
- Carrying** Manual carrying of bundles of rattan from the forest along footpaths to a collection point; some dragging of the canes may occur when going downhill.
- Dragging or sliding** Moving bundles of rattan along the ground from the forest to a collection point; the practice causes some damage to the canes that come in contact with the ground.
- Rafting** Tying together bundles of rattan to form a raft, which is then towed by a boat to a collection point on land; the rattans are dried immediately after being taken out of the water.
- Trucking** Trucks are a common means in Malaysia of transporting rattans from the collection point on a forest road to the sales site or factory.

PROCESSING

FOR LOCAL ARTISANAL USES

- Blow torch bending** Application of heat to rattan canes to permit bending them in moulds into various shapes for making furniture and other artisanal products; this method of bending causes scorching; steam bending is preferable but not feasible for the typical backyard operation.
- Dyeing** Colouring split canes used in making baskets, mats, etc.
- Plaiting** Interweaving strands of rattan peel or split rattan at approximately right angles.
- Smoking** A finishing process typically used for artisanal baskets, containers and other products woven from split canes. The object is held over a pot containing a slow smoky fire and produces an intensification of colour in dyed canes; the term also is used to refer to *fumigation*, q.v.
- Splitting** Dividing lengthwise rattan canes to produce split rattan and cores; in artisanal work this process typically is done manually with a knife.

Weaving The intertwining of rattan canes or split rattan in a variety of different directions and patterns to make baskets, mats and an assortment of other hand-woven products.

INDUSTRIAL LEVEL FURNITURE MANUFACTURING

Assembly Joining together the different components of a piece of furniture, using nails, screws, staple, adhesives or strips of rattan (binding); cf. final assembly, subassembly.

Bending The forming of rattan canes into various shapes. Canes softened and made pliable with steam are forced into moulds and left there for 12–24 hours to ensure that the desired shape is permanently formed.

Binding Wrapping of rattan furniture joints with rattan peel; leather strips or other materials may also be used.

Bleaching Removal of stains on rattan poles by subjecting them to a bleaching solution and an elevated temperature (60 °C for two hours). A recommended bleaching solution is 1 percent hydrogen peroxide and a 1:4 ratio of sodium hydroxide to sodium silicate.

Buffing The sanding of moulded and bent rattan components on a buffing machine using pneumatic cylinders and brush heads.

Caning Using split rattan or other material to weave the seats of chairs and/or sides of rattan furniture.

Coping Synonym for scribing, q.v.

Coring Splitting of rattan canes to produce rattan cores and rattan peel.

Debarking Synonym for *peeling*, q.v.

Decorticating Synonym for *peeling*, q.v.

Dipstaining A staining process in which the component or assembled furniture piece is dipped into a staining solution, rather than having the stain applied by spraying or brush; cf. finishing.

Dowelling A rattan furniture construction technique for connecting components by drilling holes and inserting dowels and glue.

Drilling Boring holes in subassembly components in preparation for final furniture assembly when screws are used.

End-coping Coping, q.v.

Final assembly Joining together of basic frame structures into a finished piece of furniture; this may be done in the factory or after shipment of knock-down components; cf. assembly, sub-assembly.

Finishing Application of surface finishes to rattan furniture to lighten or darken the surface; finishes can be clear lacquers, stains or pigmented lacquers.

Grinding machine Peeling machine, q.v.

Grooving Cutting an indentation and drilling a series of holes in a rattan chair frame so that it can be caned with rattan strips or some other material.

Jointing	The attachment of component parts of rattan frames and seats; common structural joints are: chucking and boring (mortise and tenon); scribing or coping; cross lap joint; end half-lap joint or splicing; mitre joint; dowel joint (for seat frames).
Peeling	Removal of the outer portion of the rattan cane by either manual or mechanical means; also called <i>debarking</i> , <i>decorticating</i> .
Peeling machine	An industrial machine used to peel rattan canes; also called a <i>grinding machine</i> .
Personal protective equipment (PPE)	Protective gear worn by workers engaged in activities such as rattan furniture finishing where spray guns are used.
Plastic coating	The practice of applying a coating of plastic to poor quality rattan skin before it is used for weaving.
Polishing	Term used to refer to the sanding (q.v.) of peeled rattan poles.
Rattan cooker	The term for a simple cylindrical metal structure with one end closed and the other with a swing door, within which rattan canes are placed for steaming.
Rattan set	A matching group of furniture pieces having the same design patterns and finish; a typical rattan parlour set consists of a sofa, one or two chairs, an end table and coffee table.
Rattan splitting machine	An industrial machine used to split rattan canes to produce core and/or peel.
Rounding machine	An industrial machine used to peel rattan canes; cf. peeling.
Sanding	The passing of straight poles through a profile sanding machine. At least three profile sanders are used (coarse, medium and fine) so that components can be finished in one pass.
Scribing	The most common jointing system for rattan furniture. The round section of rattan is scribed to create a perfect fit during assembly; scribing is done manually with a gouge chisel or a specially designed cutting bit on an electric drill.
Splitting	Longitudinally dividing canes to produce material weaving (caning) and binding by peeling away the hard outer skin; the core produced is rounded to make round core, or resplit into smaller sections by hand or machine.
Staining	changing the colour of rattan canes through the use of stains or pigmented lacquers; cf. finishing.
Standard Specifications for Rattan Furniture	Details in Appendix VI, q.v.
Steaming	The process of heating rattan canes in water vapour at 100 °C for 20–30 minutes to permit bending to virtually any curvature.
Straightening	The use of improvised tools or a hydraulic machine to straighten bent canes before they are cut into lengths for furniture components.
Subassembly	Formation of the basic frame structures of a piece of furniture, which may constitute knock-down components for shipping and final assembly by a wholesaler; cf. assembly, final assembly.
Weaving	A synonym for <i>caning</i> .

TRADE

Atmospheric damage

Damage to packaged rattan furniture by moisture, fumes, dust, dirt and sunlight. This type of damage can be minimized by lining export crates or boxes with bituminized paper or polyethylene film, leaving the bottom open to help avoid condensation.

Complete construction

Furniture that is fully constructed and does not need any assembly before being sold on the retail market; cf. completely knock-down; knock-down.

Completely knock-down (CKD)

A method of furniture construction of flat and straight components intended to be assembled in a factory before retail sale. Advantages of CKD furniture are convenience of packaging and reduced freight charges through more efficient use of container space. CKD construction does not reduce the strength or performance of the furniture; cf. knock-down.

Compression damage

Damage to packaged rattan furniture caused by stacking pallets too high resulting in excessive compression forces on the bottom pallets. This type of damage can be avoided by using sturdy crates that are adequately braced and supported inside and can support up to 10 tonnes. The best protection is to ship in a freight container.

Containerized shipment

Export of rattan furniture in a large metal container that minimizes handling, loss and damage; containers can be loaded at the furniture factory and transported by truck to a port for sea shipment.

Impact damage

Damage to packaged rattan furniture caused by crates being dropped. This type of damage can be reduced by holding furniture away from the sides and edges of the crate by using corrugated board and padding the furniture.

Knock-down (KD)

A method of furniture construction between completely knock down and complete construction; components are made so that they can be assembled by the retail customer. KD affords some efficiency in terms of packaging and freight charge savings.

Lampit

A type of floor mat made in Indonesia from rattan splits which are threaded together; exported to Japan where it is known as *tatami*, q.v.

Middleman

Trader, q.v.

Semi-processors

Generally small-scale operators who buy raw rattan from collectors and produce washed and sulphured rattan and a variety of semi-processed products; cf. trader.

Tatami

Japanese term for floor mats made of rattan splits joined together with strings pierced through them; lampit, q.v.

Thick-reed furniture

Term for furniture made of rattan core; not considered rattan furniture in the strict sense.

Tikar

A fine floor mat made in Indonesia from rattan splits which are threaded together; an export item.

- Trader** A town-based, provincial or city-based individual who purchases rattan from cutters and sells it to buyers who are generally semi-processors or manufacturers. Traders typically operate under either informal or formal business arrangements with the cutters and buyers, and may deal in raw or partially processed canes.
- Vibration damage** Damage to packaged rattan furniture caused by rubbing of furniture parts against each other or against the inside of the package. This type of damage can be eliminated by immobilizing the furniture in its container and allowing as little movement as possible between the finish and any surface that contacts it.

MISCELLANEOUS

- Atap** (Malay) Thatch made (usually in panels) by bending palm leaflets over a lath or the leaf-rachis; certain species of *Calamus* and *Daemonorops* are so used.
- BARSTOOL** Bamboo and Rattan Science and Technology Links – Products and Applications. A bamboo and rattan technical advisory group on products and applications issues, initiated by INBAR. Web site: www.smartgroups.com/groups/barstool-pa
- Bentwood** A general term referring to furniture with major components that are bent and not cut into shape; sometimes applied to rattan furniture.
- Buri** Common name for the palm *Corypha utan* and the split petioles from it used in the Philippines to make rattan-like furniture.
- Chicks** Slatted blinds sometimes made with rattan petioles from which the spines have been removed.
- Dragon's blood** A dark-red resin exuded from fruit of a few species of *Daemonorops*; e.g. *D. draco*, *D. didymophylla* and others. Not to be confused with a similar product from the dragon tree, *Dracaena draco*, which is not a palm.
- INBAR** International Network for Bamboo and Rattan. Established in 1993 with headquarters in New Delhi, India; headquarters moved to Beijing, China in 1998. Supports research and publishes books, studies and a news magazine. Web site: www.inbar.int
- Jernang** (Malay) dragon's blood, q.v.
- Lawyer cane** A variable common name applied to four different species of *Calamus* in Australia: *C. australis*, lawyer cane; *C. caryotoides*, fishtail lawyer cane; *C. moti*, yellow lawyer cane; and *C. muelleri*, southern lawyer cane.
- Malacca cane** A walking stick made from the stem of *Calamus scipionum*, esteemed because of its long internodes; sticks made from a single internode command the highest prices; named after the export port.
- PCS** A production to consumption system analysis; in the case of rattans it consists of an analysis of the stock and flow of rattan from the harvesting of the raw material to the final product and market. Each point of product transformation or processing is examined with regard to the stakeholders involved, the functions performed and the market linkages.

Rattan Business, News & Community. Web site: www.rattanlink.com

RIC	Rattan Information Centre. Founded in 1982 and located at Forest Research Institute Kepong, Selangor, Malaysia. Supported research and published books, studies and the <i>RIC Bulletin</i> until 1993. The <i>RIC Bulletin</i> is scheduled to be resuscitated as an e-bulletin in 2002 and published twice per year. Web site: www.frim.gov.my
<i>Sepak raga</i> (Malay)	A game played in Southeast Asia using a flexible ball made of split rattan.
Shoot	The edible apical meristem, growing point or palm heart. At least three commercial rattan species are exploited for this product: <i>Calamus simplicifolius</i> ; <i>C. tenuis</i> and <i>Daemonorops jenkinsiana</i> .
<i>Takraw</i> (Thai)	<i>Sepak raga</i> , q.v.
<i>Umbut</i> (Malay)	General term in Southeast Asia for the soft, edible shoot of a rattan; shoot, q.v.
Wicker	A general term applied to woven furniture and baskets. Among the pliant raw materials used to make wicker ware are rattan, bamboo, willow, reeds, etc.

VERNACULAR NAMES

Vernacular name	Genus/Species	Country/ Region	Language (L), Geographic area (G), Notes
<i>Abuan</i>	<i>Calamus diepenhorstii</i>	Philippines	
<i>Ain</i>	<i>Korthalsia ferox</i>	Borneo	Kenyah Dayak (L)
<i>Air</i>	<i>Calamus erinaceus</i> <i>Daemonorops angustifolia</i> <i>D. fissa</i>	Malaysia Malaysia Borneo	
<i>Ambalua</i>	<i>Plectocomiopsis geminiflora</i>	Malaysia	Kedazan (L), Sabah (G)
<i>Apas</i>	<i>Calamus reyesianus</i>	Philippines	
<i>Arichural</i>	<i>Calamus travancoricus</i>	India	Malayalam (L), Kerala (G)
<i>Arorog</i>	<i>Calamus javensis</i>	Philippines	
<i>Arugda</i>	<i>Calamus arugda</i>	Philippines	Ibanag (L)
<i>Arurug</i>	<i>Calamus javensis</i>	Philippines	Palawan (G)
<i>Babuyan</i>	<i>Calamus usitatus</i>	Philippines	Sambal (L)
<i>Baiteng</i>	<i>Calamus tetradactylus</i>	China	
<i>Bala mata</i>	<i>Daemonorops fissa</i>	Borneo	Kenyah Dayak (L)
<i>Balala</i>	<i>Calamus multinervis</i>	Philippines	
<i>Banakbo</i>	<i>Calamus megaphyllus</i>	Philippines	Manobo (L)
<i>Bara bet</i>	<i>Calamus viminalis</i>	Bangladesh	Chittagong (G)
<i>Barabuasca</i>	<i>Desmoncus mitis</i>	Peru	
<i>Batang</i>	See: rotan batang		
<i>Batang merah</i>	<i>Daemonorops robusta</i>	Indonesia	Central Sulawesi (G)
<i>Batu</i>	See: rotan batu		
<i>Bayabong</i>	<i>Calamus manillensis</i>	Philippines	Manobo (L)
<i>Be'ang</i>	<i>Korthalsia echinometra</i>	Borneo	Kenyah Dayak (L)
<i>Bioengan</i>	<i>Daemonorops sabut</i>	Borneo	Benuaq Dayak (L)
<i>Borangan</i>	<i>Calamus ornatus</i>	Philippines	Mindanao (G)
<i>Boro bet</i>	<i>Calamus viminalis</i>	India	
<i>Botet</i>	<i>Korthalsia furtadoana</i> <i>K. rostrata</i>	Borneo Borneo	(both) Samarinda trade
<i>Boyukng</i>	<i>Calamus optimus</i>	Borneo	Benuaq Dayak (L)
<i>Butarak</i>	<i>Calamus vidalianus</i>	Philippines	Ilokano (L)
<i>Cekolo</i>	<i>Myrialepis paradoxa</i>	Indonesia	Sumatra (G)
<i>Charab</i>	<i>Calamus andamanicus</i>	India	Andaman Islands (G)
<i>China bet</i>	<i>Calamus pseudorivalis</i>	India	Nicobar Islands (G)
<i>Chowdah</i>	<i>Calamus andamanicus</i>	India	Andaman Islands (G)
<i>Coo ceme</i>	<i>Calamus blumei</i>	Malaysia	
<i>Coon cemees</i>	<i>Calamus blumei</i>	Malaysia	
<i>Coonk stook</i>	<i>Calamus javensis</i>	Malaysia	Perak (G)
<i>Da-teng</i>	<i>Calamus wailong</i>	China	
<i>Dagdag</i>	<i>Calamus siphonospathus</i>	Philippines	Ilokano (L)
<i>Daban</i>	See: rotan daban		
<i>Dalimban</i>	<i>Calamus melanorhynchus</i>	Philippines	Bagobo (L)
<i>Danan</i>	<i>Korthalsia ferox</i>	Borneo	Bentian & Benuaq Dayak (L)
<i>Danye shengteng</i>	<i>Calamus simplicifolius</i>	China	Hainan Island (G)
<i>Dara panda</i>	<i>Calamus scabridulus</i>	Indonesia	
<i>Datu</i>	<i>Calamus minabassae</i>	Indonesia	Sulawesi (G)
<i>Demelai</i>	<i>Calamus gonospermus</i>	Borneo	Kenyah Dayak (L)

Vernacular name	Genus/Species	Country/ Region	Language (L), Geographic area (G), Notes
<i>Demere</i>	<i>Calamus deërratus</i>	Ghana	Twi (L) and trade name
<i>Dhangri bet</i>	<i>Calamus leptospadix</i>	India	
<i>Ditaan</i>	<i>Daemonorops ochrolepis</i>	Philippines	
<i>Dok</i>	See: <i>rotan dok</i>		
<i>Douung-douung</i>	<i>Calamus cumingianus</i>	Philippines	Manobo (L)
<i>Dre sekam</i>	<i>Daemonorops micracantha</i>	Malaysia	Pahang (G)
<i>Duanye shengteng</i>	<i>Calamus egregius</i>	China	
<i>Golak bet</i>	<i>Daemonorops jenkinsiana</i>	India	
<i>Gonot pipit</i>	<i>Daemonorops fissa</i>	Malaysia	
<i>Hamlis</i>	<i>Calamus discolor</i>	Philippines	
<i>Hanapas</i>	<i>Calamus usitatus</i>	Philippines	Bikol (L)
<i>Hoe cacing</i>	<i>Calamus ciliaris</i>	Indonesia	Sundanese (L)
<i>Hongteng</i>	<i>Daemonorops jenkinsiana</i>	China	
<i>Howe belukbuk</i>	<i>Calamus burckianus</i>	Indonesia	Western Java (G)
<i>Howe cacing</i>	<i>Calamus heteroideus</i> <i>C. javensis</i>	Indonesia Indonesia	Western Java (G)
<i>Howe gelang</i>	<i>Calamus polystachys</i>	Indonesia	Western Java (G)
<i>Howe seel</i>	<i>Daemonorops melanochaetes</i>	Indonesia	Western Java (G)
<i>Huangteng</i>	<i>Daemonorops jenkinsiana</i>	China	
<i>Huwi pantis</i>	<i>Calamus luridus</i>	Indonesia	Sumatra (G)
<i>Ilem</i>	<i>Calamus pilosellus</i>	Borneo	Kenyah Dayak (L)
<i>Inai</i>	<i>Ceratolobus subangulatus</i>	Borneo	Bentian Dayak (L)
<i>Irit</i>	See: <i>rotan irit</i>		
<i>Jacitara</i>	<i>Desmoncus giganteus</i> <i>D. mitis</i> <i>D. orthacanthos</i> <i>D. polyacanthos</i>	Brazil Brazil Brazil Brazil	
<i>Jaoei</i>	<i>Calamus tomentosus</i>	Borneo	Kenyah Dayak (L)
<i>Jarmasi</i>	<i>Calamus leiocaulis</i>	Indonesia	Sulawesi (G)
<i>Jati bet</i>	<i>Calamus tenuis</i>	India	
<i>Jehab</i>	<i>Calamus trachycoleus</i>	Borneo	Bentian & Benuaq Dayak (L), Samarinda trade
<i>Jelayan</i>	<i>Calamus ornatus</i>	Borneo	
<i>Jepung</i>	<i>Daemonorops crinita</i>	Borneo	Bentian & Benuaq Dayak (L), Samarinda trade
<i>Jungan</i>	<i>Daemonorops sabut</i>	Indonesia	East Kalimantan (G)
<i>Kalapit</i>	<i>Calamus microcarpus</i>	Philippines	Bikol (L)
<i>Keb</i>	<i>Korthalsia cheb</i>	Malaysia	
<i>Keerah</i>	<i>Calamus densiflorus</i>	Thailand	
<i>Kebes</i>	<i>Calamus pandanosmus</i> <i>Calamus rhytidomus</i>	Borneo Borneo	(both) Bentian & Benuaq Dayak (L), Samarinda trade
<i>Kebes murah</i>	<i>Calamus pilosellus</i>	Borneo	Samarinda trade
<i>Keplar</i>	<i>Daemonorops ingens</i>	Malaysia	
<i>Kesoleg</i>	<i>Calamus ornatus</i>	Borneo	Bentian Dayak (L)
<i>Kodi</i>	<i>Eremospatha macrocarpa</i>	DR Congo	Luba (L)
<i>Kokop</i>	<i>Calamus bacularis</i>	Malaysia	Penan (L), Sarawak (G)
<i>Korak bet</i>	<i>Calamus latifolius</i>	India	
<i>Kotok</i>	See: <i>rotan kotok</i>		
<i>Kulakling</i>	<i>Calamus microsphaerion</i>	Philippines	

Vernacular name	Genus/Species	Country/ Region	Language (L), Geographic area (G), Notes
<i>Kumaboy</i>	<i>Calamus discolor</i>	Philippines	Tagalog (L)
<i>Kurakling</i>	<i>Calamus spinifolius</i>	Philippines	Pampanga (L), Tagalog (L)
<i>Labit</i>	<i>Calamus microsphaerion</i>	Philippines	Tagalog (L)
<i>Lalun</i>	<i>Korthalsia furtadoana</i>	Borneo	Bentian & Benuaq Dayak (L)
<i>Lalun djengan</i>	<i>Korthalsia rostrata</i>	Borneo	Benuaq Dayak (L)
<i>Lambutan</i>	<i>Calamus halconensis</i> <i>var. dimorphacanthus</i> <i>C. microcarpus</i>	Philippines Philippines	Tagalog (L)
<i>Lapa</i>	<i>Daemonorops lamprolepis</i>	Indonesia	
<i>Laru</i>	<i>Calamus symphysipus</i>	Indonesia	Central Sulawesi (G)
<i>Lasas</i>	<i>Korthalsia robusta</i>	Malaysia	
<i>Lasi</i>	<i>Calamus bicolor</i>	Philippines	
<i>Latea</i>	<i>Daemonorops lamprolepis</i>	Indonesia	Southern Sulawesi (G)
<i>Lauro sura</i>	<i>Calamus didymocarpus</i>	Indonesia	Southern Sulawesi (G)
<i>Lembulu</i>	<i>Calamus hispidulus</i>	Borneo	Kenyah Dayak (L)
<i>Leme</i>	<i>Calamus longisetus</i>	Myanmar	
<i>Lempinit landang</i>	<i>Daemonorops micracantha</i>	Malaysia	Sandakan (G)
<i>Lempinit pabetan</i>	<i>Daemonorops elongata</i>	Malaysia	
<i>Lempinit tingkau</i>	<i>Calamus paspalanthus</i>	Malaysia	
<i>Lempinit ular-ular</i>	<i>Calamus javensis</i>	Malaysia	Sabah (G)
<i>Leutik</i>	<i>Calamus caesius</i>	Sarawak	
<i>Limuran</i>	<i>Calamus ornatus</i>	Philippines	Luzon (G)
<i>Lintokan</i>	<i>Calamus manillensis</i>	Philippines	Bagobo (L)
<i>Liteng</i>	<i>Calamus egregius</i>	China	Hainan Island (G)
<i>Litoko</i>	<i>Calamus manillensis</i>	Philippines	Ifugao (L)
<i>Lukuan</i>	<i>Calamus reyesianus</i>	Philippines	
<i>Lumpit</i>	<i>Daemonorops calicarpa</i>	Malaysia	
<i>Ma wewel</i>	<i>Calamus ovoideus</i>	Sri Lanka	Sinhala (L)
<i>Mai lepe</i>	<i>Calamus conirostris</i>	Malaysia	
<i>Makak</i>	<i>Laccosperma secundiflorum</i>	West Africa	Trade name
<i>Manau</i>	See: <i>rotan manau</i>		
<i>Manau riang</i>	<i>Calamus oxleyanus</i>	Indonesia	Palembang (G)
<i>Manau tikus</i>	<i>Calamus manan</i>	Malaysia	Small diameter only; see: <i>rotan manau tikus</i>
<i>Mangkawayan</i>	<i>Calamus subinermis</i>	Borneo	Kadazan/Dusun (L)
<i>Mantang</i>	<i>Calamus ornatus</i> <i>Plectocomia elongata</i>	Malaysia Malaysia	
<i>Matakito</i>	<i>Calamus leptostachys</i>	Indonesia	Buton (G)
<i>Matamba</i>	<i>Desmoncus cirrhiferus</i>	Colombia	
<i>Matkong</i>	<i>Calamus mitis</i>	Philippines	Ilokano (L)
<i>Me'a</i>	<i>Korthalsia echinometra</i>	Borneo	Bentian & Benuaq Dayak (L)
<i>Moa</i>	<i>Plectocomiopsis geminiflora</i>	Malaysia	Bidayuh (L), Sarawak (G)
<i>Nag betta</i>	<i>Calamus nagbetta</i>	India	Karnataka (G)
<i>Nat</i>	<i>Calamus andamanicus</i>	India	Nicobars (G)
<i>Ngenau</i>	<i>Calamus manan</i>	Borneo	Bentian & Benuaq Dayak (L)
<i>Nguay</i>	<i>Calamus peregrinus</i>	Thailand	
<i>Nkan</i>	<i>Laccosperma robustum</i> <i>L. secundiflorum</i>	Cameroon, Equatorial Guinea, Gabon	Fang (L)

Vernacular name	Genus/Species	Country/ Region	Language (L), Geographic area (G), Notes
<i>Nlong</i>	<i>Eremospatha macrocarpa</i>	Cameroon, Equatorial Guinea, Gabon	Bulu (L), Fang (L)
<i>Nue waatang</i>	<i>Calamus didymocarpus</i>	Indonesia	
<i>Padao</i>	<i>Calamus viminialis</i>	Cambodia	
<i>Pakoe</i>	<i>Calamus pilosellus</i>	Borneo	Bentian & Benuaq Dayak (L)
<i>Palaklakanin sumulid</i>	<i>Daemonorops ochrolepis</i>	Philippines	Tagalog (L)
<i>Palanog</i>	<i>Calamus symphysisipus</i>	Philippines	Luzon (G)
<i>Palasan</i>	<i>Calamus merrillii</i>	Philippines	Biko (L), Marobo (L), Tagalog (L)
<i>Palem paris</i>	<i>Calamus ciliaris</i>	Indonesia	Horticulture
<i>Palimanok</i>	<i>Calamus siphonospathus</i>	Philippines	Pampanga (L)
<i>Panlis</i>	<i>Calamus ramulosus</i>	Philippines	Tagalog (L)
<i>Pannichural</i>	<i>Calamus thwaitesii</i>	India	Malayalam (L)
<i>Parasan</i>	<i>Calamus merrillii</i>	Philippines	Bisaya (L)
<i>Pelus</i>	<i>Calamus javensis</i>	Borneo	Bentian Dayak (L)
<i>Pelus belang</i>	<i>Ceratolobus subangulatus</i>	Borneo	Benuaq Dayak (L)
<i>Pelus djengan</i>	<i>Ceratolobus subangulatus</i>	Borneo	Benuaq Dayak (L)
<i>Pelus lintung</i>	<i>Calamus flabellatus</i>	Borneo	Bentian Dayak (L)
<i>Pelus mingay</i>	<i>Calamus javensis</i>	Borneo	Benuaq Dayak (L)
<i>Pelus susu</i>	<i>Calamus javensis</i>	Borneo	Benuaq Dayak (L)
<i>Pelus tulukn</i>	<i>Ceratolobus concolor</i>	Borneo	Benuaq Dayak (L)
<i>Penjalin cacing</i>	<i>Calamus viminialis</i>	Indonesia	Bali (G)
<i>Perambu</i>	<i>Calamus rotang</i>	India	
<i>Pitpit</i>	<i>Daemonorops curranii</i>	Philippines	
<i>Pondos alus</i>	<i>Calamus minabassae</i>	Indonesia	Northern Sulawesi (G)
<i>Pondos batang</i>	<i>Calamus zollingeri</i>	Indonesia	Sulawesi (G)
<i>Pondos embel</i>	<i>Calamus symphysisipus</i>	Indonesia	Northern Sulawesi (G)
<i>Pulut merah</i>	<i>Ceratolobus concolor</i> <i>C. subangulatus</i> <i>Daemonorops crinita</i>	Borneo Borneo Borneo	(all) Samarinda trade
<i>Pulut putih</i>	<i>Calamus flabellatus</i> <i>C. javensis</i>	Borneo Borneo	(both) Samarinda trade
<i>Rasi</i>	<i>Calamus bicolor</i>	Philippines	
Red rattan	<i>Daemonorops jenkinsiana</i>	China	
<i>Rimoran</i>	<i>Calamus ornatus</i>	Philippines	Palawan (G)
<i>Rong</i>	<i>Calamus inermis</i>	India	
<i>Ronti</i>	<i>Calamus leptostachys</i>	Indonesia	
<i>Rotan air</i>	<i>Calamus blumei</i> <i>C. tomentosus</i> <i>C. zollingeri</i>	Borneo Borneo Indonesia	Samarinda trade Samarinda trade Moluccas (G), Seram (G)
<i>Rotan asas</i>	<i>Korthalsia robusta</i>	Malaysia	
<i>Rotan bacap</i>	<i>Daemonorops leptopus</i>	Malaysia	
<i>Rotan bakul</i>	<i>Daemonorops micracantha</i>	Malaysia	Negri Sembilan (G)
<i>Rotan bangkorn</i>	<i>Daemonorops elongata</i>	Malaysia	Sandakan (G)
<i>Rotan batang</i>	<i>Calamus zollingeri</i>	Indonesia	

Vernacular name	Genus/Species	Country/ Region	Language (L), Geographic area (G), Notes
<i>Rotan batu</i>	<i>Calamus convallium</i> <i>C. diepenhorstii</i> <i>C. flabellatus</i> <i>C. insignis</i> <i>C. subinermis</i>	Borneo Indonesia Malaysia Malaysia Malaysia	Kenyah Dayak (L) Except Sulawesi (G)
<i>Rotan bejungan</i>	<i>Daemonorops fissa</i>	Indonesia	Central Kalimantan (G)
<i>Rotan belubu</i>	<i>Daemonorops periacantha</i>	Malaysia	Sabah (G)
<i>Rotan bembangin</i>	<i>Calamus marginatus</i>	Malaysia	Sandakan (G)
<i>Rotan berman</i>	<i>Calamus flabellatus</i>	Indonesia	
<i>Rotan besi</i>	<i>Calamus marginatus</i>	Indonesia	Palembang (L)
<i>Rotan boga</i>	<i>Calamus koordersianus</i>	Indonesia	Central Sulawesi (G)
<i>Rotan buku dalam</i>	<i>Calamus ornatus</i>	Indonesia	Northern Sulawesi (G)
<i>Rotan buku hitam</i>	<i>Calamus palustris</i>	Malaysia	Peninsular Malaysia (G)
<i>Rotan bulu</i>	<i>Calamus hispidulus</i>	Indonesia	
<i>Rotan bulu rusa</i>	<i>Daemonorops robusta</i>	Indonesia	Western Seram (G), Ambon (G)
<i>Rotan cacing</i>	<i>Calamus heteroidens</i> <i>C. javensis</i> <i>C. unifarius</i> <i>C. viminalis</i>	Indonesia Philippines Indonesia Indonesia	Western Java (G) Wrongly applied Sumatra (G), Java (G)
<i>Rotan cucor</i>	<i>Calamus castaneus</i>	Malaysia	
<i>Rotan dago kancil</i>	<i>Calamus conirostris</i>	Indonesia	
<i>Rotan daban</i>	<i>Korthalsia echinometra</i> <i>K. flagellaris</i> <i>K. laciniosa</i> <i>K. rigida</i>	Malaysia Malaysia Malaysia Malaysia	
<i>Rotan dalem buku</i>	<i>Calamus conirostris</i>	Indonesia	
<i>Rotan damp</i>	<i>Daemonorops fissa</i>	Malaysia	Sandakan (G)
<i>Rotan demuk</i>	<i>Calospatha scortechinii</i>	Malaysia	
<i>Rotan dok</i>	<i>Calamus ornatus</i>	Malaysia	Selangor (G)
<i>Rotan dudok</i>	<i>Calamus perakensis</i> <i>C. sedens</i>	Malaysia Malaysia	
<i>Rotan getah</i>	<i>Daemonorops angustifolia</i> <i>D. melanochaetes</i>	Malaysia Malaysia	Peninsular Malaysia (G)
<i>Rotan gunung</i>	<i>Calamus exilis</i>	Indonesia	
<i>Rotan irit</i>	<i>Calamus trachycoleus</i>	Indonesia	Kalimantan (G)
<i>Rotan jergang</i>	<i>Daemonorops draco</i>	Indonesia	Sumatra (G)
<i>Rotan jermasi</i>	<i>Calamus leiocaulis</i>	Indonesia	
<i>Rotan jernang</i>	<i>Daemonorops draco</i> <i>D. micracantha</i> <i>D. propinqua</i>	Indonesia Malaysia Malaysia	Sumatra (G) Peninsular Malaysia (G)
<i>Rotan kerai</i>	<i>Calamus conirostris</i> <i>C. luridus</i> <i>C. scabridulus</i>	Malaysia Malaysia Malaysia	
<i>Rotan kerai gunung</i>	<i>Calamus simplex</i>	Malaysia	
<i>Rotan kerai hitam</i>	<i>Calamus diepenhorstii</i>	Malaysia	Peninsular Malaysia (G)
<i>Rotan kertong</i>	<i>Myrialepis paradoxa</i>	Malaysia	
<i>Rotan kesup</i>	<i>Calamus ornatus</i>	Indonesia	Bengkulu (G)
<i>Rotan kikir</i>	<i>Calamus scabridulus</i>	Malaysia	
<i>Rotan koman</i>	<i>Calamus diepenhorstii</i>	Malaysia	
<i>Rotan kotok</i>	<i>Daemonorops fissa</i>	Indonesia	East Kalimantan (G)

Vernacular name	Genus/Species	Country/ Region	Language (L), Geographic area (G), Notes
<i>Rotan kunyung</i>	<i>Calamus longispatus</i>	Malaysia	
<i>Rotan lambang</i>	<i>Calamus ornatus</i>	Indonesia	Central Sulawesi (G)
<i>Rotan legi</i>	<i>Daemonorops melanochaetes</i>	Indonesia	Eastern Java (G)
<i>Rotan lelo</i>	<i>Daemonorops melanochaetes</i>	Indonesia	Sumatra (G), Bengkulu (G)
<i>Rotan liah</i>	<i>Calamus laevigatus</i>	Brunei	
<i>Rotan lili</i>	<i>Calamus exilis</i> <i>C. flabellatus</i> <i>C. javensis</i>	Malaysia Indonesia Indonesia	Southern Kalimantan (G)
<i>Rotan lintang</i>	<i>Calamus pilosellus</i>	Indonesia	
<i>Rotan manau</i>	<i>Calamus manan</i>		General throughout the region and trade
<i>Rotan manau buku bitam</i>	<i>Calamus tumidus</i>	Malaysia	Northern Peninsular Malaysia (G)
<i>Rotan manau padi</i>	<i>Calamus marginatus</i>	Indonesia	Bangka (G)
<i>Rotan manau telur</i>	<i>Calamus manan</i>	Malaysia	Peninsular Malaysia (G)
<i>Rotan manau tikus</i>	<i>Calamus tumidus</i>	Malaysia Indonesia	Peninsular Malaysia (G), Sumatra (G)
<i>Rotan maran</i>	<i>Calamus mattanensis</i>	Indonesia	Kalimantan (G)
<i>Rotan meiya</i>	<i>Korthalsia echinometra</i>	Indonesia	
<i>Rotan melukut</i>	<i>Calamus muricatus</i>	Indonesia	
<i>Rotan merah</i>	<i>Korthalsia cheb</i> <i>K. echinometra</i> <i>K. ferox</i> <i>K. flagellaris</i> <i>K. rigida</i>	(all) Borneo	(all) Samarinda trade
<i>Rotan minyak</i>	<i>Calamus oxleyanus</i> <i>Daemonorops angustifolia</i>	Malaysia Malaysia	
<i>Rotan murah</i>	<i>Calamus pogonocanthus</i> <i>Daemonorops sabut</i>	Borneo Borneo	Samarinda trade Samarinda trade
<i>Rotan ombol</i>	<i>Calamus symphysipus</i>	Indonesia	Sulawesi (G)
<i>Rotan opot</i>	<i>Calamus javensis</i>	Indonesia	Sumatra (G), Bengkulu (G)
<i>Rotan pabit</i>	<i>Calamus densiflorus</i>	Malaysia	
<i>Rotan paku</i>	<i>Calamus exilis</i>	Malaysia	
<i>Rotan pasir</i>	<i>Calamus palustris</i>	Malaysia	Perak (G)
<i>Rotan patani</i>	<i>Calamus minabassae</i>	Indonesia	Central Sulawesi (G)
<i>Rotan patis</i>	<i>Calamus unifarius</i>	Indonesia	Western Java (G)
<i>Rotan pehekan</i>	<i>Calamus marginatus</i>	Indonesia	Southern Kalimantan (G)
<i>Rotan pipit</i>	<i>Daemonorops elongata</i>	Malaysia	
<i>Rotan pitik</i>	<i>Daemonorops oblonga</i>	Indonesia	
<i>Rotan poprok</i>	<i>Daemonorops oblonga</i>	Indonesia	Eastern Java (G)
<i>Rotan putih</i>	<i>Calamus diepenhorstii</i>	Indonesia Malaysia	Sabah (G)
<i>Rotan rilang</i>	<i>Plectocomiopsis geminiflora</i>	Malaysia	Malay (L)
<i>Rotan rima</i>	<i>Calamus blumei</i>	Malaysia	Sabah (G)
<i>Rotan rua</i>	<i>Plectocomiopsis geminiflora</i>	Indonesia	
<i>Rotan sabong</i>	<i>Calamus polystachys</i>	Malaysia	Peninsular Malaysia (G)
<i>Rotan sabung</i>	<i>Calamus polystachys</i>	Malaysia	
<i>Rotan sabut</i>	<i>Calamus conirostris</i> <i>Daemonorops sabut</i>	Malaysia Malaysia	Temuan (L)
<i>Rotan sakat</i>	<i>Calamus muricatus</i>	Indonesia	Kalimantan (G)

Vernacular name	Genus/Species	Country/ Region	Language (L), Geographic area (G), Notes
<i>Rotan sega</i>	<i>Calamus caesius</i>		General throughout region and in trade
“Rotan sega” in error	<i>C. rhytidomus</i>	Indonesia	Nunukan, East Kalimantan (G)
<i>Rotan sega air</i>	<i>Calamus axillaris</i>	Indonesia Malaysia	
<i>Rotan sega batu</i>	<i>Calamus diepenhorstii</i>	Indonesia	Except Sulawesi (G)
<i>Rotan sega beruang</i>	<i>Calamus palustris</i>	Malaysia	Pahang (G)
<i>Rotan sego</i>	<i>Calamus caesius</i> <i>C. optimus</i>	Indonesia Indonesia	Sumatra (G) Bengkulu (G)
<i>Rotan semambu</i>	<i>Calamus scipionum</i>		General throughout region and in trade
<i>Rotan semampun</i>	<i>Calamus laevigatus</i>	Malaysia	Name also used for <i>C. praetermissus</i> J. Dransf.
<i>Rotan semut</i>	<i>Korthalsia rostrata</i>	Malaysia	
<i>Rotan sendang</i>	<i>Daemonorops grandis</i>	Singapore	
<i>Rotan sepet</i>	<i>Daemonorops hystrix</i>	Indonesia	
<i>Rotan sirikis</i>	<i>Calamus paspalanthus</i>	Malaysia	Peninsular Malaysia (G)
<i>Rotan sotong</i>	<i>Plectocomiopsis geminiflora</i>	Indonesia	Sumatra (G)
<i>Rotan susu</i>	<i>Daemonorops robusta</i>	Indonesia	Northern Sulawesi (G)
<i>Rotan tabi ayam</i>	<i>Calamus tomentosus</i>	Malaysia	
<i>Rotan tabi landak</i>	<i>Daemonorops hystrix</i>	Malaysia	Peninsular Malaysia (G)
<i>Rotan taman</i>	<i>Calamus caesius</i> <i>C. optimus</i>	Indonesia Indonesia	Southern and central Kalimantan (G) Central Kalimantan (G)
<i>Rotan telinga</i>	<i>Calamus palustris</i>	Malaysia	Kedah/Perlis (L)
<i>Rotan tobiti</i>	<i>Calamus inops</i> <i>C. subinermis</i>	Indonesia	
<i>Rotan tukas</i>	<i>Calamus blumei</i> <i>C. tomentosus</i>	Malaysia Malaysia	Perak (G)
<i>Rotan tunggal</i>	<i>Calamus laevigatus</i> <i>C. occidentalis</i> <i>C. subinermis</i> <i>Daemonorops didymophylla</i>	Malaysia Java Malaysia Indonesia	Selangor (G) Malay (L)
<i>Rotan udang</i>	<i>Korthalsia rostrata</i>	Malaysia	
<i>Rotan wi jerenang</i>	<i>Daemonorops micracantha</i>	Malaysia	
<i>Rotan wuluh</i>	<i>Calamus unifarius</i>	Indonesia	Eastern Java (G)
<i>Rotan yuk</i>	<i>Calamus muricatus</i>	Malaysia	Sabah (G)
<i>Rote batu</i>	<i>Calamus javensis</i>	Thailand	
<i>Runti</i>	<i>Calamus leptostachys</i>	Indonesia	Sulawesi (G)
<i>Sababai</i>	<i>Calamus elmerianus</i>	Philippines	Manobo (L)
<i>Saba-ong</i>	<i>Calamus grandifolius</i>	Philippines	Tagalog (L)
<i>Samanid</i>	<i>Calamus elmerianus</i>	Philippines	Bagobo (L)
<i>Sambonotan</i>	<i>Calamus bicolor</i>	Philippines	Bagobo (L)
<i>Samole</i>	<i>Calamus pedicellatus</i>	Indonesia	Bugis (G)
<i>Samulid</i>	<i>Calamus reyesianus</i>	Philippines	Tagalog (L)
<i>Sanam</i>	<i>Korthalsia cheb</i>	Borneo	Kenyah Dayak (L)
<i>Sanka beth</i>	<i>Daemonorops kurzianus</i>	India	Andaman Islands (G)
<i>Saput</i>	<i>Calamus laevigatus</i>	Borneo	Kenyah Dayak (L)

Vernacular name	Genus/Species	Country/ Region	Language (L), Geographic area (G), Notes
<i>Sarani</i>	<i>Calamus moseleyanus</i>	Philippines	Bagobo (L)
<i>Saranoi</i>	<i>Daemonorops curranii</i>	Philippines	Tagbanva (L)
<i>Savit asaq</i>	<i>Daemonorops sparsiflora</i>	Malaysia	Penan (L), Sarawak (G)
<i>Savit payah</i>	<i>Daemonorops longispatha</i>	Malaysia	Penan (L), Sarawak (G)
<i>Sega</i>	See: rotan sega		
<i>Sega batu</i>	<i>Calamus marginatus</i>	Borneo	Samarinda trade
<i>Sek batang</i>	<i>Calamus ornatus</i>	Malaysia	Pahang (G)
<i>Seka</i>	<i>Calamus caesius</i>	Borneo	Kenyah Dayak (L)
<i>Sekei udang</i>	<i>Daemonorops melanochaetes</i>	Indonesia	Riau (G)
<i>Selutup</i>	<i>Calamus optimus</i>	Borneo	Samarinda trade
<i>Semambu</i>	See: rotan semambu		
<i>Semoleh membatong</i>	<i>Calamus pogonocanthus</i>	Borneo	Kenyah Dayak (L)
<i>Semoleh timaitong</i>	<i>Calamus pogonocanthus</i>	Borneo	Kenyah Dayak (L)
<i>Seringan</i>	<i>Daemonorops sabut</i>	Borneo	Kenyah Dayak (L)
<i>Si'it</i>	<i>Calamus marginatus</i>	Borneo	Benuaq Dayak (L)
<i>Si'it batu</i>	<i>Calamus marginatus</i>	Borneo	Bentian Dayak (L)
<i>Sika</i>	<i>Calamus caesius</i>	Philippines	
<i>Sika-sika</i>	<i>Calamus microsphaerion</i>	Philippines	
<i>Silau-silau</i>	<i>Calamus gibbsianus</i>	Malaysia	Sabah (G)
<i>Sintang</i>	<i>Daemonorops hystrix</i>	Indonesia	Palembang (L)
<i>Sokag</i>	<i>Calamus caesius</i>	Borneo	Bentian & Benuaq Dayak (L)
<i>Sudu wewel</i>	<i>Calamus ovoidens</i>	Sri Lanka	Sinhala (L)
<i>Suko</i>	<i>Calamus optimus</i>	Indonesia	South Kalimantan (G)
<i>Sundi bet</i>	<i>Calamus guruba</i>	India	
<i>Takathong</i>	<i>Calamus caesius</i>	Thailand	Rangae District, Narathiva Province (G)
<i>Talola</i>	<i>Calamus siphonospathus</i>	Philippines	Tagalog (L)
<i>Taman</i>	See: rotan taman		
<i>Tandulang-glubat</i>	<i>Calamus microcarpus</i>	Philippines	Tagalog (L)
<i>Tandulang-parang</i>	<i>Calamus usitatus</i>	Philippines	Tagalog (L)
<i>Tebdas</i>	<i>Calamus mitis</i>	Philippines	Ivatan (L)
<i>Tebungan</i>	<i>Calamus ornatus</i>	Borneo	Kenyah Dayak (L)
<i>Tebri bet</i>	<i>Plectocomia himalayana</i>	India	
<i>Teland</i>	<i>Calamus leptostachys</i>	Indonesia	South Sulawesi (G)
<i>Teretes</i>	<i>Daemonorops rubra</i>	Indonesia	Western Java (G)
<i>Thuda rena</i>	<i>Calamus ovoidens</i>	Sri Lanka	Sinhala (L)
<i>Timai</i>	<i>Calamus javensis</i> <i>Ceratolobus concolor</i>	Borneo Borneo	(both) Kenyah Dayak (L)
<i>Toan pekat</i>	<i>Daemonorops sabut</i>	Malaysia	Sabah (G)
<i>Tobiti</i>	See: rotan tobiti		
<i>Tobiti siombo</i>	<i>Calamus didymocarpus</i>	Indonesia	Central Sulawesi (G)
<i>Tomani</i>	<i>Calamus boniensis</i>	Indonesia	Southern Sulawesi (G)
<i>Tumalim</i>	<i>Calamus mindorensis</i>	Philippines	Tagalog (L)
<i>Tumaram</i>	<i>Calamus mindorensis</i>	Philippines	Bikol (L)
<i>Tuwu</i>	<i>Calamus scipionum</i>	Borneo	Bentian & Benuaq Dayak (L)
<i>Ubanon</i>	<i>Calamus discolor</i>	Philippines	Cebu Bisaya (L)
<i>Ubli</i>	<i>Calamus multinervis</i>	Philippines	Ilokano (L)
<i>Udat</i>	<i>Daemonorops didymophylla</i>	Malaysia	Penan (L), Sarawak (G)

Vernacular name	Genus/Species	Country/ Region	Language (L), Geographic area (G), Notes
<i>Udom bet</i>	<i>Calamus longisetus</i>	Bangladesh	Cox's Bazar (G)
<i>Ue puti</i>	<i>Calamus albus</i>	Indonesia	
<i>Uwai belalong</i>	<i>Retispatha dumetosa</i>	Brunei	
<i>Uwai kiton</i>	<i>Calamus ornatus</i>	Brunei	
<i>Uwai lambat</i>	<i>Daemonorops periacantha</i>	Brunei	
<i>Uwai pagit</i>	<i>Calamus marginatus</i>	Brunei	
<i>Uwai pegit</i>	<i>Calamus conirostris</i>	Brunei	
<i>Uwai peladas</i>	<i>Calamus javensis</i>	Brunei	
<i>Uwai podos</i>	<i>Calamus javensis</i>	Brunei	
<i>Uwai taut</i>	<i>Calamus axillaris</i> <i>C. pogonacanthus</i>	Brunei Brunei	
<i>Uwai telong</i>	<i>Calamus optimus</i>	Malaysia	
<i>Uwau paya</i>	<i>Calamus marginatus</i>	Malaysia	Sarawak (G)
<i>Uwe ahun tain</i>	<i>Calamus albus</i>	Indonesia	Ambon (G)
<i>Uwe rence</i>	<i>Calamus minahassae</i>	Indonesia	Southern Sulawesi (G)
<i>Uwe sangkayu-kayu</i>	<i>Calamus symphysipus</i>	Indonesia	Southern Sulawesi (G)
<i>Uwi hurang</i>	<i>Korthalsia echinometra</i>	Indonesia	
<i>Uwi jernang kecil</i>	<i>Daemonorops didymophylla</i>	Indonesia	Palembang (G)
<i>Uwi kalang</i>	<i>Daemonorops hystrix</i>	Indonesia	
<i>Uwi pabe</i>	<i>Calamus exilis</i>	Indonesia	Palembang (G)
<i>Vara casha</i>	<i>Desmoncus giganteus</i>	Peru	
<i>Velichural</i>	<i>Calamus hookerianus</i>	India	Malayalam (L)
<i>Waaï chaang</i>	<i>Calamus ornatus</i>	Thailand	Pattani (G)
<i>Waaï khring</i>	<i>Calamus palustris</i>	Thailand	Trang (G)
<i>Waaï kung</i>	<i>Myrialepis paradoxa</i>	Thailand	Trang (G)
<i>Waaï maithao</i>	<i>Calamus scipionum</i>	Thailand	Peninsular Malaysia (G)
<i>Waaï phon khon non</i>	<i>Daemonorops sabut</i>	Thailand	
<i>Wae dangah</i>	<i>Daemonorops hystrix</i>	Malaysia	Penan (L), Sarawak (G)
<i>Wae saput</i>	<i>Calamus laevigatus</i>	Malaysia	Sabah (G)
<i>Wae sawit usen</i>	<i>Calamus muricatus</i>	Malaysia	Penan (L), Sarawak (G)
<i>Wai boun</i>	<i>Calamus rudentum</i>	Lao PDR	
<i>Wai-chak</i>	<i>Daemonorops grandis</i>	Thailand	
<i>Wai-chakkao</i>	<i>Calamus castaneus</i>	Thailand	
<i>Wai-dam</i>	<i>Calamus oxleyanus</i>	Thailand	
<i>Wai-hin</i>	<i>Calamus insignis</i>	Thailand	
<i>Wain hom</i>	<i>Calamus acanthospathus</i> <i>C. gracilis</i>	Lao PDR Lao PDR	
<i>Wai kaepung</i>	<i>Calamus blumei</i>	Thailand	Surattani (G)
<i>Wai-kampbuan</i>	<i>Calamus longisetus</i>	Thailand	
<i>Wai-khao</i>	<i>Calamus castaneus</i>	Thailand	
<i>Wai-khipet</i>	<i>Daemonorops didymophylla</i>	Thailand	
<i>Wai-khom</i>	<i>Calamus diepenhorstii</i> <i>C. siamensis</i>	Thailand Lao PDR	
<i>Wai kuan</i>	<i>Calamus javensis</i>	Thailand	Pattani (G)
<i>Wai-kungnampharai</i>	<i>Plectocomiopsis geminiflora</i>	Thailand	
<i>Wai kunun</i>	<i>Calamus blumei</i>	Thailand	Trang (G)
<i>Wai lau cincin</i>	<i>Calamus polystachys</i>	Indonesia	Sumatra (G)

Vernacular name	Genus/Species	Country/ Region	Language (L), Geographic area (G), Notes
Wai mon	<i>Calamus viminalis</i>	Thailand	
Wai-nam	<i>Daemonorops angustifolia</i>	Thailand	
Wai namleuang	<i>Calamus platycanthus</i>	Lao PDR	
Wai nwn	<i>Calamus nambariensis</i>	Lao PDR	
Wai sam bai taw	<i>Calamus viminalis</i>	Thailand	
Wai sideken	<i>Calamus unifarius</i>	Indonesia	Western Sumatra (G)
Wai som	<i>Calamus viminalis</i>	Thailand	
Wai-somm	<i>Daemonorops jenkinsiana</i>	Thailand	
Wai ta kha thong	<i>Calamus caesius</i>	Thailand	
Wai tek	<i>Calamus javensis</i>	Thailand	Southern Thailand (G)
Wai thoon	<i>Calamus poilanei</i>	Lao PDR	
Wai thork	<i>Calamus solitarius</i>	Lao PDR	
Wai wan	<i>Calamus rhabdoctadus</i>	Lao PDR	
Wailong	<i>Calamus wailong</i>	China	
We maliang	<i>Calamus ornatus</i>	Malaysia	Sarawak (G)
Wee jematang tengan	<i>Korthalsia cheb</i>	Malaysia	
Wee ligur	<i>Calamus conirostris</i>	Malaysia	Kayan (L)
Wee lumbak	<i>Calamus ruvidus</i>	Malaysia	Iban (L), Sarawak (G)
Wei dangh	<i>Calamus myriacanthus</i>	Malaysia	Penan (L), Sarawak (G)
Wei saput	<i>Calamus mattanensis</i>	Malaysia	Penan (L), Sarawak (G)
White rattan	<i>Calamus tetradactylus</i>	China	
Wi anak	<i>Calamus javensis</i> <i>C. laevigatus</i>	Brunei Brunei	
Wi babut	<i>Calamus bacularis</i>	Malaysia	Bidayuh (L), Sarawak (G)
Wi batu	<i>Calamus diepenhorstii</i>	Malaysia	Iban (L)
Wi belubu	<i>Daemonorops longispatha</i>	Brunei	
Wi buluh	<i>Calamus erioacanthus</i>	Malaysia	Sarawak (G)
Wi danum	<i>Calamus conirostris</i>	Brunei	
Wi darum	<i>Daemonorops didymophylla</i> <i>D. ingens</i>	Brunei Malaysia	Iban (L), Sarawak (G)
Wi dudok	<i>Calamus myriacanthus</i> <i>Daemonorops ruptilis</i>	Malaysia Malaysia	Iban (L), Sarawak (G)
Wi duduk	<i>Daemonorops hystrix</i>	Malaysia	Iban (L), Sarawak (G)
Wi embalua	<i>Plectocomiopsis geminiflora</i>	Brunei	
Wi empunoh	<i>Daemonorops periacantha</i>	Malaysia	
Wi empunok	<i>Daemonorops periacantha</i>	Brunei Malaysia	Sarawak (G)
Wi empunok ruai	<i>Daemonorops scapigera</i>	Malaysia	Iban (L), Sarawak (G)
Wi gemaing	<i>Calamus axillaris</i>	Brunei	
Wi jerenang	<i>Daemonorops didymophylla</i>	Brunei	
Wi labu	<i>Calamus pilosellus</i>	Brunei	
Wi laleb	<i>Plectocomiopsis geminiflora</i>	Malaysia	Iban (L), Sarawak (G)
Wi lantak patong	<i>Calamus mattanensis</i>	Malaysia	Iban (L), Sarawak (G)
Wi lemaing	<i>Calamus axillaris</i>	Brunei	
Wi lepoh	<i>Daemonorops sabut</i>	Brunei Malaysia	Sarawak (G)
Wi lohong	<i>Calamus paspalanthus</i>	Malaysia	Sarawak (G)
Wi matahari	<i>Calamus marginatus</i>	Brunei	
Wi natahari	<i>Calamus marginatus</i>	Malaysia	

Vernacular name	Genus/Species	Country/ Region	Language (L), Geographic area (G), Notes
<i>Wi ondo</i>	<i>Daemonorops draco</i>	Malaysia	Sarawak (G)
<i>Wi pale</i>	<i>Calamus pogonacanthus</i>	Malaysia	Kayan (L), Sarawak (G)
<i>Wi peladas</i>	<i>Calamus javensis</i>	Brunei	
<i>Wi ruah air</i>	<i>Daemonorops sparsiflora</i>	Malaysia	Iban (L), Sarawak (G)
<i>Wi ruak ai</i>	<i>Daemonorops fissa</i>	Malaysia	Sarawak (G)
<i>Wi sego</i>	<i>Calamus optimus</i>	Brunei Malaysia	Sarawak (G)
<i>Wi semoi</i>	<i>Calamus semoi</i>	Malaysia	Sarawak (G)
<i>Wi seruing</i>	<i>Daemonorops ingens</i>	Malaysia	Kayan (L), Sarawak (G)
<i>Wi singkau</i>	<i>Calamus paspalanthus</i>	Brunei Malaysia	
<i>Wi sugi</i>	<i>Calamus laevigatus</i>	Malaysia	Sarawak (G)
<i>Wi takong</i>	<i>Calamus flabellatus</i>	Brunei Malaysia	Iban (L), Sarawak (G)
<i>Wi tapah</i>	<i>Calamus pseudoulur</i>	Malaysia	Sarawak (G)
<i>Wi tautuk</i>	<i>Calamus flabellatus</i>	Malaysia	Bidayuh (L), Sarawak (G)
<i>Wi tedong</i>	<i>Calamus marginatus</i>	Malaysia	
<i>Wi tibu</i>	<i>Daemonorops longispatha</i>	Malaysia	Iban (L), Sarawak (G)
<i>Wi tulang</i>	<i>Calamus bacularis</i> <i>C. myriacanthus</i>	Malaysia Malaysia	Iban (L), Sarawak (G) Iban (L), Sarawak (G)
<i>Wi tunggal</i>	<i>Calamus muricatus</i>	Brunei	
<i>Wi tunjung</i>	<i>Calamus muricatus</i>	Malaysia	Iban (L), Sarawak (G)
<i>Wi tut</i>	<i>Calamus pogonacanthus</i> <i>C. semoi</i>	Brunei Malaysia Brunei Malaysia	Iban (L), Sarawak (G)
Yellow rattan	<i>Daemonorops jenkinsiana</i>	China	

CROSS-LISTING: GENUS/SPECIES TO VERNACULAR NAMES

Genus/Species	Vernacular names
<i>Calamus acanthospathus</i>	Wai hom
<i>C. andamanicus</i>	Charab, Chowdah, Nat
<i>C. arugda</i>	Arugda
<i>C. axillaris</i>	Rotan sega air, Uwai taut, Wi gemaing, Wi lemaing
<i>C. bacularis</i>	Kokop, Wi babut, Wi tulang
<i>C. bicolor</i>	Lasi, Rasi, Sambonotan
<i>C. blumei</i>	Coo ceme, Coon cemees, Rotan air, Rotan rima, Rotan tukas, Wai kaepung, Wai kunun
<i>C. bonienseis</i>	Tomani
<i>C. burckianus</i>	Howe belukbuk
<i>C. caesiis</i>	Leutik, Rotan sega, Rotan sego, Rotan taman, Seka, Sika, Sokag, Takathong, Wai ta kha thong
<i>C. castaneus</i>	Rotan cucor, Wai-chakkao, Wai-khao
<i>C. ciliaris</i>	Hoe cacing, Palembang
<i>C. conirostris</i>	Mai lepe, Rotan dago kancil, Rotan dalem buku, Rotan kerai, Rotan sabut, Uwai pegit, Wee ligur, Wi danum
<i>C. convallium</i>	Batu
<i>C. cumingianus</i>	Douung-douung
<i>C. deërratus</i>	Demmere
<i>C. densiflorus</i>	Keerah, Rotan pabit
<i>C. didymocarpus</i>	Lauro sura, Nue waatang, Tobiti siombo
<i>C. diepenhorstii</i>	Abuan, Rotan batu, Rotan kerai hitam, Rotan koman, Rotan putih, Rotan sega batu, Wai-khom, Wi batu
<i>C. discolor</i>	Hamlis, Kumaboy, Ubanon
<i>C. egregius</i>	Duanye shengteng, Liteng
<i>C. elmerianus</i>	Sababai, Samanid
<i>C. erinaceus</i>	Air
<i>C. erioacanthus</i>	Wi buluh
<i>C. exilis</i>	Rotan gunung, Rotan lilin, Rotan paku, Uwi pabe
<i>C. flabellatus</i>	Pelus litung, Pulut putih, Rotan batu, Rotan berman, Rotan lilin, Wi takong, Wi tautuk
<i>C. gibbsianus</i>	Silau-silau
<i>C. gonospermus</i>	Demnai
<i>C. gracilis</i>	Wai hom
<i>C. grandifolius</i>	Saba-ong
<i>C. guruba</i>	Sundi bet
<i>C. halconensis</i> var. <i>dimorphacanthus</i>	Lambutan
<i>C. heteroideus</i>	Howe cacing, Rotan cacing
<i>C. hispidulus</i>	Lembulu, Rotan bulu
<i>C. hookerianus</i>	Velichural
<i>C. inermis</i>	Rong
<i>C. inops</i>	Rotan tobiti
<i>C. insignis</i>	Rotan batu, Wai-hin
<i>C. javensis</i>	Arorog, Arurug, Coonk stook, Howe cacing, Lempinit ular-ular, Pelus, Pelus mingay, Pelus susu, Pulut putih, Rotan cacing, Rotan lilin, Rotan opot, Rote batu, Timai, Uwai peladas, Uwai podos, Wai kuan, Wai tek, Wi anak, Wi peladas
<i>C. koordersianus</i>	Rotan boga
<i>C. laevigatus</i>	Rotan liab, Rotan semampun, Rotan tunggal, Saput, Wae saput, Wi anak, Wi sugi

Genus/Species	Vernacular names
<i>C. latifolius</i>	Korak bet
<i>C. leiocaulis</i>	Jarmasi, Rotan jermasi
<i>C. leptospadix</i>	Dhangri bet
<i>C. leptostachys</i>	Matakito, Ronti, Runti, Teland
<i>C. longisetus</i>	Leme, Udom bet, Wai-kamphuan
<i>C. longispathus</i>	Rotan kunyung
<i>C. luridus</i>	Huwi pantis, Rotan kerai
<i>C. manan</i>	Manau tikus, Ngenau, Rotan manau, Rotan manau telur
<i>C. manillensis</i>	Bayabong, Lintokan, Litoko
<i>C. marginatus</i>	Rotan bembangin, Rotan besi, Rotan manau padi, Rotan pehekan, Segu batu, Si'it, Si'it batu, Uwai pagit, Uwau paya, Wi matahari, Wi natahari, Wi tedong
<i>C. mattanensis</i>	Rotan maran, Wei saput, Wi lantak patong
<i>C. megaphyllus</i>	Banakbo
<i>C. melanorhynchus</i>	Dalimban
<i>C. merrillii</i>	Palasan, Parasan
<i>C. microcarpus</i>	Kalapit, Lambutan, Tandulang-glubat
<i>C. microsphaerion</i>	Kulakling, Labit, Sika-sika
<i>C. minahassae</i>	Datu, Podos alus, Rotan patani, Uwerence
<i>C. mindorensis</i>	Tumalim, Tumaram
<i>C. mitis</i>	Matkong, Tebdas
<i>C. moseleyanus</i>	Sarani
<i>C. multinervis</i>	Balala, Ubli
<i>C. muricatus</i>	Rotan melukut, Rotan sakat, Rotan yuk, Wae sawit usen, Wi tunggal, Wi tunjung
<i>C. myriacanthus</i>	Wei dangb, Wi dudok, Wi tulang
<i>C. nagbetta</i>	Nag betta
<i>C. nambariensis</i>	Wai nwn
<i>C. optimus</i>	Boyukng, Rotan sego, Rotan taman, Selutup, Suko, Uwai telong, Wi sego
<i>C. ornatus</i>	Borangan, Jelayan, Kesoleg, Limuran, Mantang, Rimoran, Rotan buku dalam, Rotan dok, Rotan kesup, Rotan lambang, Sek batang, Tebungan, Uwai kiton, Waai chaang, We maliang
<i>C. ovoideus</i>	Ma wewel, Sudu wewel, Thuda rena
<i>C. oxleyanus</i>	Manau riang, Rotan minyak, Wai-dam
<i>C. palustris</i>	Rotan buku hitam, Rotan pasir, Rotan sega beruang, Rotan teling, Waai kbring
<i>C. pandanosmus</i>	Kebes
<i>C. paspalanthus</i>	Lempinit tingkau, Rotan sirikis, Wi lobong, Wi singkau
<i>C. pedicellatus</i>	Samole
<i>C. perakensis</i>	Rotan dudok
<i>C. peregrinus</i>	Nguay
<i>C. pilosellus</i>	Ilem, Kebes murah, Pakoe, Rotan lintang, Wi labu
<i>C. platyacanthus</i>	Wai namleuang
<i>C. pogonocanthus</i>	Rotan murah, Semoleh membatong, Semoleh timaitong, Uwai taut, Wi pale, Wi tut
<i>C. poilanei</i>	Wai thoon
<i>C. polystachys</i>	Howe gelang, Rotan sabong, Rotan sabung, Wai lau cincin
<i>C. pseudorivalis</i>	China bet
<i>C. pseudoulur</i>	Wi tapah
<i>C. ramulosus</i>	Panlis
<i>C. reyesianus</i>	Apas, Lukuan, Samulid
<i>C. rhabdocladus</i>	Wai wan
<i>C. rhytidomus</i>	Kebes, Rotan sega
<i>C. rotang</i>	Perambu
<i>C. rudentum</i>	Wai boun

Genus/Species	Vernacular names
<i>C. ruvidus</i>	Wee lumbak
<i>C. scabridulus</i>	Dara panda, Rotan kerai, Rotan kikir
<i>C. scipionum</i>	Rotan semambu, Tuwu, Wai maithao
<i>C. sedens</i>	Rotan dudok
<i>C. semoi</i>	Wi semoi, Wi tut
<i>C. siamensis</i>	Wai khom
<i>C. simplex</i>	Rotan kerai gunung
<i>C. simplicifolius</i>	Danye sbengteng
<i>C. siphonospathus</i>	Dagdag, Palimanok, Talola
<i>C. solitarius</i>	Wai thork
<i>C. spinifolius</i>	Kurakling
<i>C. subinermis</i>	Mangkawayan, Rotan batu, Rotan tunggal
<i>C. symphysipus</i>	Laru, Palanog, Pundos embel, Rotan ombol, Uwe sangkayu-kayu
<i>C. tenuis</i>	Jati bet
<i>C. tetradactylus</i>	Baiteng, White rattan
<i>C. thwaitesii</i>	Pannichural
<i>C. tomentosus</i>	Rotan air, Rotan tahi ayam, Rotan tukas
<i>C. trachycoleus</i>	Jehab, Rotan irit
<i>C. travancoricus</i>	Arichural
<i>C. tumidus</i>	Rotan manau buku hitam, Rotan manau tikus
<i>C. unifarius</i>	Rotan cacing, Rotan patis, Rotan wuluh, Wai sideken
<i>C. usitatus</i>	Babuyan, Hanapas, Tandulang-parang
<i>C. vidalianus</i>	Butarak
<i>C. viminalis</i>	Bara bet, Boro bet, Padao, Penjalin cacing, Rotan cacing, Wai mon, Wai sam bai taw, Wai som
<i>C. wailong</i>	Da-teng, Wailong
<i>C. zollingeri</i>	Pundos batang, Rotan air, Rotan batang
<i>Calospatha scortechinii</i>	Rotan demuk
<i>Ceratolobus concolor</i>	Pelus tulukn, Pulut merah, Timai
<i>C. subangulatus</i>	Inai, Pelus beland, Pelus djengan, Pulut merah
<i>Daemonorops angustifolia</i>	Air, Rotan getah, Rotan minyak, Wai-nam
<i>D. calicarpa</i>	Lumpit
<i>D. crinita</i>	Jepung, Pulut merah
<i>D. curranii</i>	Pitpit, Saranoi
<i>D. didymophylla</i>	Rotan tunggal, Udat, Uwi jernang kecil, Wai-khipet, Wi darum, Wi jerenang
<i>D. draco</i>	Rotan jergang, Rotan jernang, Wi ondo
<i>D. elongata</i>	Lempinit pabetan, Rotan bangkorn, Rotan pipit
<i>D. fissa</i>	Air, Bala mata, Gonot pipit, Rotan bejungan, Rotan damp, Rotan kotok, Wi ruak ai
<i>D. grandis</i>	Rotan sendang, Wai-chak
<i>D. hystrix</i>	Rotan sepet, Rotan tabi landak, Sintang, Uwi kalang, Wae dangah, Wi duduk
<i>D. ingens</i>	Keplar, Wi darum, Wi seruing
<i>D. jenkinsiana</i>	Golak bet, Hongteng, Huangteng, Red rattan, Yellow rattan
<i>D. kurzianus</i>	Sanka beth
<i>D. lamprolepis</i>	Lapa, Latea
<i>D. leptopus</i>	Rotan bacap
<i>D. longispatha</i>	Savit payah, Wi belubu, Wi tibu
<i>D. melanochaetes</i>	Howe seel, Rotan getah, Rotan legi, Rotan lelo, Sekei udang
<i>D. micracantha</i>	Dre sekam, Lempinit landang, Rotan bakul, Rotan jernang, Rotan wi jerenang

Genus/Species	Vernacular names
<i>D. oblonga</i>	Rotan pitik, Rotan poprok
<i>D. ochrolepis</i>	Ditaan, Palaklakanin sumulid
<i>D. periacantha</i>	Rotan belubu, Uwai lambat, Wi empunoh, Wi empunok
<i>D. propinqua</i>	Rotan jernang
<i>D. robusta</i>	Batang merah, Rotan bulu rusa, Rotan susu
<i>D. rubra</i>	Teretes
<i>D. rutilis</i>	Wi dudok
<i>D. sabut</i>	Bioengan, Jungan, Rotan murah, Rotan sabut, Seringan, Toan pekat, Waai phon khon non, Wi lepoh
<i>D. scapigera</i>	Wi empunok ruai
<i>D. schmidtiana</i>	Wai-somm
<i>D. sparsiflora</i>	Savit asaq, Wi ruah air
<i>Desmoncus cirrhiferus</i>	Matamba
<i>D. giganteus</i>	Jacitara, Vara casha
<i>D. mitis</i>	Barahuasca, Jacitara
<i>D. orthacanthos</i>	Jacitara
<i>D. polyacanthos</i>	Jacitara
<i>Eremospatha macrocarpa</i>	Kodi, Nlong
<i>Korthalsia cheb</i>	Keb, Sanam, Rotan merah, Wee jematang tangan
<i>K. echinometra</i>	Be'ang, Me'a, Rotan dahan, Rotan meiya, Rotan merah, Uwi hurang
<i>K. ferox</i>	Ain, Danan, Rotan merah
<i>K. flagellaris</i>	Rotan dahan, Rotan merah
<i>K. furtadoana</i>	Botet, Lalun
<i>K. laciniosa</i>	Rotan dahan
<i>K. rigida</i>	Rotan dahan, Rotan merah
<i>K. robusta</i>	Lasas, Rotan asas
<i>K. rostrata</i>	Botet, Lalun djengan, Rotan semut, Rotan udang
<i>Laccosperma robustum</i>	Nkan
<i>L. secundiflorum</i>	Makak, Nkan
<i>Myrialepis paradoxa</i>	Cekolo, Rotan kertong, Waai kung
<i>Plectocomia elongata</i>	Mantang
<i>P. himalayana</i>	Tehri bet
<i>Plectocomiopsis geminiflora</i>	Ambalua, Moa, Rotan rilang, Rotan rua, Rotan sotong, Wai-kungnampharai, Wi embalua, Wi laleh
<i>Retispatha dumetosa</i>	Uwai belalong

Appendix I

CLASSIFICATION OF PALM FAMILY (PALMAE¹) RATTAN GENERA

Subfamilies	Calamoideae ²	Calamoideae	Calamoideae	Calamoideae	Arecoideae
Tribes	Calameae	Calameae	Calameae	Lepidocaryeae	Cocoeae
Subtribes	Calaminae	Korthalsiinae	Plectocomiinae	Ancistrophyllinae ⁶	Bactridinae
Genera	Calamus ³ Calospatha Ceratolobus Daemonorops Pogonotium Retispatha	Korthalsia ⁴	Myrialepis ⁵ Plectocomia Plectocomiopsis	Eremospatha Laccosperma ⁷ Oncocalamus	Desmoncus ⁸

¹ Alternate name *Arecaceae*

² Syn. *Lepidocaryoideae*

³ Syn. *Cornera*, *Palmijuncus*, *Rotang*, *Rotanga*, *Schizospatha*, *Zalacella*

⁴ Syn. *Calamosagus*

⁵ Syn. *Bejandia*

⁶ Syn. *Oncocalaminae* (was separate from *Ancistrophyllinae* now submerged into former, hence not a synonym as such)

⁷ Syn. *Ancistrophyllum*, *Neoancistrophyllum*

⁸ Syn. *Atitara*

Source: Baker *et al.* 2000; Uhl & Dransfield, 1999.

Appendix II

RATTAN GENERA, SPECIES AND GEOGRAPHIC DISTRIBUTION

Genus	Number of species	Geographic distribution
<i>Calamus</i> L. (Latin – a cane or reed)	370-400	Equatorial Africa, India, southern China, south to Australia and the western Pacific
<i>Calospatha</i> Becc. (Greek – beautiful bract)	1	Peninsular Malaysia
<i>Ceratolobus</i> Bl. (Greek – horned capsule)	6	Peninsular Malaysia, Sumatra, Borneo, Java
<i>Daemonorops</i> Bl. (Greek – demon bush).	115	India, southern China, south through Malay Archipelago to western New Guinea
<i>Desmoncus</i> Mart. (Greek – banded hooks)	~ 7	Southern Mexico to southern Brazil and Bolivia
<i>Eremospatha</i> (Mann & Wendl.) Wendl. (Latin – spatheless)	11 (another new species in press)	Humid tropical West Africa and into Congo Basin
<i>Korthalsia</i> Bl. (P.W. Korthals 1807–1892, Dutch botanist).	~ 26	Indochina and Myanmar to New Guinea
<i>Laccosperma</i> (G. Mann & H. Wendl.) Drude (Latin – hole-in-the-seed)	6 (another new species in press)	Humid tropical West, Southern and East Africa
<i>Myrialepis</i> Becc. (Greek – countless scales)	1	Indo-China, Thailand, Myanmar, Peninsular Malaysia and Sumatra
<i>Oncocalamus</i> (Mann & Wendl.) Hooker (Latin – hooked cane)	4 (new species recently described)	Humid tropical Africa: SE Nigeria west and south to Cameroon, Gabon, Equatorial Guinea and northern Congo
<i>Plectocomia</i> Mart. ex Bl. (Greek – plaited hair)	~ 16	Himalayas and southern China to western Malesia
<i>Plectocomiopsis</i> Becc. (like <i>Plectocomia</i>)	5	Thailand, Peninsular Malaysia, Sumatra, Borneo, Lao PDR
<i>Pogonotium</i> J. Dransf. (Greek – bearded ears, referring to the auricles)	3	Peninsular Malaysia and Borneo
<i>Retispatha</i> J. Dransf. (Latin – net-like bracts)	1	Borneo

Source: Uhl & Dransfield, 1987, Dransfield, 1992.

Appendix III

UTILIZED *CALAMUS* SPECIES

Species	Utilization notes
<i>Calamus acanthospathus</i> Griff.	Canes for bridge cables, basketry
<i>C. andamanicus</i> Kurz	Excellent large-diameter canes harvested for furniture industry; leaves for thatching
<i>C. aruensis</i> Becc.	Excellent quality medium- to large-diameter canes for furniture
<i>C. arugda</i> Becc.	Entire canes for handicrafts, furniture, basketry, etc., local and export markets
<i>C. axillaris</i> Becc.	Small-diameter canes for basketry, fish traps and tying
<i>C. bacularis</i> Becc.	Canes for walking-sticks
<i>C. bicolor</i> Becc.	Ornamental use of young plants
<i>C. blumei</i> Becc.	Canes of good quality but quantities insufficient for commercial use; canes for baskets and mats
<i>C. bonienseis</i> Becc. ex Heyne	Probably sold together with other small-diameter canes
<i>C. burckianus</i> Becc.	Canes for broom handles
<i>C. caesioides</i> Bl.	Canes for commercial and traditional uses
<i>C. castaneus</i> Becc.	Leaves for thatch; immature fruits in traditional medicine
<i>C. ciliaris</i> Bl.	Slender canes for weaving and binding; seedlings used as ornamentals
<i>C. conirostris</i> Becc.	Canes of poor quality, rarely used; fruit eaten
<i>C. convallium</i> J. Dransf.	Canes
<i>C. cumingianus</i> Becc.	Entire canes made into handicrafts, furniture and baskets
<i>C. deerratus</i> G. Mann & H. Wendl.	Canes for construction and weaving
<i>C. densiflorus</i> Becc.	Canes for making furniture and baskets
<i>C. didymocarpus</i> Warb. ex Becc.	Canes inferior but used for local furniture-making
<i>C. diepenhorstii</i> Miq.	Canes for tying, cordage, basketry, fish traps and noose traps
<i>C. dimorphacanthus</i> Becc. var. <i>dimorphacanthus</i>	Canes used for baskets, bags, tying, etc. for home industries
<i>C. discolor</i> Becc.	Young plants as ornamentals; canes for binding or tying
<i>C. egregius</i> Burr.	Excellent small- to medium-diameter canes for binding and weaving in furniture; new shoots edible
<i>C. elmerianus</i> Becc.	Canes for furniture, handicrafts and home industries
<i>C. erioacanthus</i> Becc.	Canes of good quality
<i>C. exilis</i> Griff.	Canes for binding, weaving, basketry, handicrafts
<i>C. flabellatus</i> Becc.	Canes for tying, binding and weaving
<i>C. gamblei</i> Becc.	Canes for furniture
<i>C. gibbsianus</i> Becc.	Canes for tying and weaving
<i>C. gonospermus</i> Becc.	Edible fruit
<i>C. gracilis</i> Roxb.	Canes for handicrafts
<i>C. grandifolius</i> Becc.	Canes for furniture
<i>C. guruba</i> (Buch-Ham) ex Mart.	Canes for basketry, chair seats
<i>C. halconensis</i> (Becc.) Baja-Lapis var. <i>dimorphacanthus</i> Becc.	Canes for chair frames, cables for ferry boats, hauling logs and as rigging on small sailboats; split canes for mats, basketry, fish traps, chair seats
<i>C. heteroideus</i> Bl.	Canes for cordage
<i>C. hispidulus</i> Becc.	Canes for weaving
<i>C. hookerianus</i> Becc.	Canes for furniture, basketry

Species	Utilization notes
<i>C. huegelianus</i> Mart.	Canes for basketry, chair frames, etc
<i>C. inermis</i> T. Anders.	Canes for police sticks, chair frames
<i>C. inops</i> Becc. Ex Heyne	Actual use of small- to medium-diameter canes not known
<i>C. insignis</i> Becc.	Split canes for basketry, cordage; spiny leaf-sheaths as food graters
<i>C. javensis</i> Bl.	Canes for cordage, basketry, noose traps, musical instruments; edible raw cabbage as medicine; spiny leaf-sheaths formerly used to make food graters
<i>C. koordersianus</i> Becc.	Canes locally for basket frames
<i>C. laevigatus</i> Mart.	Extensively collected as small-diameter cane, end-uses not documented
<i>C. latifolius</i> Roxb.	Canes for basketry, walking-sticks, furniture frames; split canes for chair seats
<i>C. leiocaulis</i> Becc. ex Heyne	Small-diameter canes extensively used to make furniture for local and export markets
<i>C. leptospadix</i> Griff.	Canes for basketry and chair seats
<i>C. leptostachys</i> Becc. ex Heyne	Excellent small-diameter canes for furniture and handicrafts for local and export markets
<i>C. longisetus</i> Griff.	Coarse cane for furniture; leaves for thatch; edible fruit
<i>C. longispathus</i> Ridl.	Young leaves occasionally as cigarette paper; fruits as medicine
<i>C. luridus</i> Becc.	Canes split for tying and binding
<i>C. manan</i> Miq.	Most desirable large-diameter canes for furniture
<i>C. manillensis</i> (Mart.) H. Wendl.	Edible fruit; canes of inferior quality for tying
<i>C. marginatus</i> (Bl.) Mart.	Poor quality but durable canes for basket frames and walking-sticks
<i>C. mattanensis</i> Becc.	Canes occasionally used to make coarse baskets
<i>C. megaphyllus</i> Becc.	Canes for basketry and tying
<i>C. melanorhynchus</i> Becc.	Canes for basketry and handicrafts
<i>C. merrillii</i> Becc.	Entire canes for chair frames, ferry boat cables, hauling logs, sailboat rigging; split canes for basketry, chairs, fish traps, etc
<i>C. microcarpus</i> Becc.	Canes for basketry
<i>C. microsphaerion</i> Becc.	Entire canes for basketry
<i>C. minahassae</i> Becc.	Canes as cordage
<i>C. mindorensis</i> Becc.	Popular large-diameter canes for furniture; split canes for basketry, cordage
<i>C. mitis</i> Becc.	Canes for basketry and tying
<i>C. moseleyanus</i> Becc.	Canes for furniture
<i>C. multinervis</i> Becc.	Canes for furniture
<i>C. muricatus</i> Becc.	Cabbage eaten
<i>C. myriacanthus</i> Becc.	Canes for walking-sticks, cages, basket frames
<i>C. nagbettaii</i> Fernandez & Dey	Canes for basketry
<i>C. nambariensis</i> Becc.	Canes for handicrafts
<i>C. optimus</i> Becc.	Canes used to make mats, for weaving, to bind furniture and cordage
<i>C. ornatus</i> Bl.	Major use of canes for furniture; also for walking-sticks, handles for implements and flooring; leaves, cabbage and roots as medicine; fruits occasionally eaten
<i>C. ovoidens</i> Thwaites ex Trimen	Split canes for basketry; entire canes for furniture frames; split cane cores for crude woven products
<i>C. oxleyanus</i> Teysm. & Binnend. ex Miq.	Canes for walking-sticks
<i>C. palustris</i> Griff.	Canes excellent for furniture frames
<i>C. pandanosmus</i> Furt.	Canes
<i>C. paspalanthus</i> Becc.	Seedlings as potential ornamental; ripe fruit pickled and young shoot eaten
<i>C. pedicellatus</i> Becc. ex Heyne	Canes apparently of good quality for furniture
<i>C. perakensis</i> Becc.	Canes occasionally used for walking-sticks

Species	Utilization notes
<i>C. peregrinus</i> Furt.	Robust canes of good quality for furniture
<i>C. pilosellus</i> Becc.	Canes of good appearance but probably only for local use
<i>C. pogonacanthus</i> Becc. ex H. Winkler	Canes of good quality for tying, binding and making coarse mats
<i>C. poilanei</i> Conrad	Canes for handicrafts
<i>C. polystachys</i> Becc.	Coarse canes used for broom handles
<i>C. pseudorivalis</i> Becc.	Canes for furniture
<i>C. pseudotenuis</i> Becc.	Canes for basketry
<i>C. pseudoulur</i> Becc.	Canes for basketry, etc.
<i>C. ramulosus</i> Becc.	Canes for furniture
<i>C. reyesianus</i> Becc.	Canes of small diameter use for furniture and basketry, local and international
<i>C. rhomboideus</i> Bl.	Canes possibly used to make baskets and mats
<i>C. rhytidomus</i> Becc.	Canes used locally for binding
<i>C. rotang</i> Linn.	Canes for basketry, chair seats
<i>C. rudentum</i> Lour.	Canes for handicrafts; edible fruit
<i>C. ruvidus</i> Becc.	Canes used for basketry and tying
<i>C. scabridulus</i> Becc.	Canes split for tying, thatching and cordage
<i>C. scipionum</i> Lour.	Canes for making moderate-quality furniture; walking-sticks, umbrella handles, etc.
<i>C. sedens</i> J. Dransf.	Canes sometimes used to make walking-sticks
<i>C. semoi</i> Becc.	Excellent quality cane; under cultivation in gardens
<i>C. simplex</i> Becc.	Canes for basketry
<i>C. simplicifolius</i> Wei	Good medium-diameter cane for furniture, binding, weaving, basketry, etc; new shoots edible
<i>C. siphonospathus</i> Mart.	Canes for basketry and tying
<i>C. solitarius</i> T. Evans <i>et al.</i>	Canes for handicrafts
<i>C. spinifolius</i> Becc.	Canes for basketry and tying
<i>C. subinermis</i> H. Wendl. ex Becc.	Canes for furniture frames; cabbage cooked as a vegetable; fruit sometimes eaten
<i>C. symphysipus</i> Becc.	Canes for furniture
<i>C. tenuis</i> Roxb.	Canes for basketry; fruits and young shoots eaten
<i>C. tetradactylus</i> Hance	Small-diameter canes for handicrafts, basketry and furniture
<i>C. thwaitesii</i> Becc.	Canes for furniture
<i>C. tomentosus</i> Becc.	Canes for tying and binding
<i>C. trachycoleus</i> Becc.	Canes used as skin peels for weaving chair seats and back; unsplit for furniture; basketry, mats, fish traps, cordage
<i>C. travancoricus</i> Bedd. ex Becc. & Hook	Canes for handicrafts and furniture
<i>C. trispermus</i> Becc.	Canes for furniture
<i>C. tumidus</i> Furt.	Canes for furniture
<i>C. ulur</i> Becc.	Split canes for cordage
<i>C. unifarius</i> H. Wendl.	Canes locally for furniture
<i>C. usitatus</i> Becc.	Canes for basketry, furniture and handicrafts
<i>C. vidalianus</i> Becc.	Canes for furniture
<i>C. viminalis</i> Willd.	Canes locally for basketry and matting
<i>C. wailong</i> S.J. Pei & S.Y. Chen	Canes for weaving and furniture
<i>C. warburgii</i> K. Schum.	Canes locally for basket frames
<i>C. zollingeri</i> Becc.	Canes for furniture frames

Appendix IV

UTILIZED *DAEMONOROPS* SPECIES

Species	Utilization notes
<i>Daemonorops angustifolia</i> (Griff.) Mart.	Canes for low-quality furniture, for coring and binding
<i>D. calicarpa</i> (Griff.) Mart.	Leaves for thatching; outer part of rachis stripped for basketry
<i>D. clemensiana</i> Becc.	Canes for basketry and tying
<i>D. crinita</i> (Miq.) Bl.	Canes for coarse basketry and cordage
<i>D. curranii</i> Becc.	Canes for basketry and tying
<i>D. didymophylla</i> Becc.	Fruit yields red resin (dragon's blood); fruit sometimes eaten; canes used as split rattan
<i>D. draco</i> (Willd.) Bl.	Fruit yields red resin (dragon's blood)
<i>D. elongata</i> Bl.	Leaves for thatching
<i>D. fissa</i> (Miq.) Bl.	Canes for local low-quality furniture; cabbage eaten
<i>D. grandis</i> (Griff.) Mart.	Leaves for thatching; outer layer of petiole and rachis peeled and split for basketry; rachis for fishing rods
<i>D. hystrix</i> (Griff.) Mart.	Canes for furniture frames, but of low quality; ripe fruits eaten
<i>D. ingens</i> J. Dransf.	Fruit eaten; leaves for thatching
<i>D. jenkinsiana</i> (Griff.) Mart.	Important medium-large diameter cane in China; canes for basketry and weaving; seeds made into necklaces; fresh shoots eaten as vegetable
<i>D. kurziana</i> Becc.	Canes for furniture
<i>D. lamprolepis</i> Becc.	Canes for binding material
<i>D. leptopus</i> (Griff.) Mart.	Canes for basketry and tying; leaflets used locally as cigarette paper
<i>D. longispatha</i> Becc.	Cabbage eaten; canes for tying
<i>D. melanochaetes</i> Bl.	Cabbage eaten; cane core used for broom handles and coarse furniture
<i>D. micracantha</i> (Griff.) Becc.	Canes split for tying; fruit source of red resin (dragon's blood)
<i>D. oblonga</i> (Reinw. ex Bl.) Bl.	Canes for basket frames, brush handles and coarse weaving
<i>D. ochrolepis</i> Becc.	Canes for furniture, baskets, bags, etc. for home industries and local commercial use
<i>D. periacantha</i> Miq.	Canes split for sewing up fish traps; cabbage and fruit edible
<i>D. propinqua</i> Becc.	Fruits yield red resin (dragon's blood)
<i>D. robusta</i> Warb.	Canes used locally for furniture frames of moderate quality
<i>D. rubra</i> (Reinw. ex Bl.) Bl.	Fruits yield red resin (dragon's blood)
<i>D. rutilis</i> Becc.	Fruits eaten
<i>D. sabut</i> Becc.	Canes split for basketry, mats and tying; fruits yield red resin (dragon's blood)
<i>D. scapigera</i> Becc.	Canes for walking sticks; fruits and cabbage eaten
<i>D. sparsiflora</i> Becc.	Canes for tying; shoots eaten

Appendix V

OTHER UTILIZED CANE SPECIES

Genus and species	Utilization notes
<i>Calospatha scortechinii</i> Becc.	Ripe fruits eaten
<i>Ceratolobus concolor</i> Bl.	Canes
<i>C. subangulatus</i> (Miq.) Becc.	Canes
<i>Desmoncus cirrhiferus</i> Gentry & Zandini	Basketry and fish traps; edible fruit
<i>D. giganteus</i> Henderson	Various woven items
<i>D. mitis</i> Kuntze	Basketry and tying house beams
<i>D. orthacanthos</i> Mart.	Basketry
<i>D. polyacanthos</i> Mart.	Basketry, sieves and for tying
<i>Eremospatha haullevilleana</i> De Wild <i>E. macrocarpa</i> (G. Mann & H. Wendl.) H. Wendl.	Chewing sticks (native toothbrush) and cane rope
<i>Korthalsia cheb</i> Becc.	Canes
<i>K. echinometra</i> Becc.	Basketry
<i>K. ferox</i> Becc.	Canes
<i>K. flagellaris</i> Miq.	Canes
<i>K. furtadoana</i> J. Dransf.	Canes
<i>K. rigida</i> Bl.	Canes
<i>K. rostrata</i> Bl.	Binding, handicrafts
<i>Laccosperma robustum</i> (Burr.) J. Dransf. <i>L. secundiflorum</i> (P. Beauv.) Kuntze	Walking sticks, furniture frames, basket frames and cane rope
<i>Myrialepis paradoxa</i> (Kurz) J. Dransf.	Coarse basketry
<i>Oncocalamus mannii</i> (G. Mann & H. Wendl.) H. Wendl.	Cane rope
<i>Plectocomia himalayana</i> Griff.	Canes for tying and basketry
<i>Plectocomiopsis geminiflora</i> (Griff.) Becc.	Coarse basketry, cordage, fish traps and chicken coops; heart edible though bitter

Note: no local use is recorded for the genera *Pogonotium* or *Retispatha*.

Appendix VI

PHILIPPINE STANDARD SPECIFICATIONS FOR RATTAN AND WICKER FURNITURE

This standard specification is hereby promulgated under a fixed designation, PS (Philippine Standard) No. 821-09.03; 1976.

This standard was prepared by the Technical Committee on Furniture and Fixtures with the full cooperation of the Chamber of Furniture Industries of the Philippines.

Suggestions for revision should be addressed to the Philippines Bureau of Standards, PO Box 3719, Manila.

1. Scope

1.1 This standard specifies requirements for rattan and wicker furniture.

2. Definition

2.1 For the purpose of this standard, the following definitions shall apply:

- (a) *Rattan Poles*. A common term that applies to the various species of tropical climbing palms composing the genera *Calamus* and *Daemonorops* of the family *Palmae*.
- (b) *Rattan Round Core*. Sometimes called “wicker”, refers to round-shaped material, with size ranging from 2 to 10 mm in diameter, processed from the core of the rattan pole, usually used for weaving.
- (c) *Rattan Flat Core*. Refers to the flat-shaped material, with size ranging from 2 to 10 mm in width, processed from the core of a pole and used for weaving and binding.
- (d) *Rattan Peel*. Also “rattan split”. refers to flat-shaped material, stripped from the skin of a rattan pole, with size ranging from 2 to 10 mm or wider in width, usually for weaving and binding.
- (e) *Check*. A separation of fibres along the pole forming a crack or fissure in the rattan, not extending through the piece from one surface to the other.
- (f) *Shake*. A separation of the fibres along the pole, caused by stress developed in the gathering and cutting, or due to improper processing.
- (g) *Break*. A separation of the fibres, which extends through a piece from one surface to the other usually perpendicular or at right angle to the directions of the grains.
- (h) *Blemishes*. Dark spots or discolorations in rattan poles caused by staining fungi or mineral stains.

3. Material requirements

3.1 *Rattan Poles*. The rattan used in the construction of furniture shall be the “palasan” or similar variety and shall be of good grade poles: mature, clean, scraped, thoroughly seasoned.

- (a) Rattan poles used for local and export market shall be treated against fungi and insect infestations, and thus free from mineral and fungal blemishes, scar, bruise and specially pinholes.
- (b) All poles are to be treated with pentachlorophenol or saline solution to safeguard against insect-borers.
- (c) Checks, Shakes and Breaks. Checks and shakes shall be permitted provided that they do not exist in close proximity to holes and grooves as to affect the strength. Breaks, however, shall not be permitted;

- 3.2 *Rattan Core and Peel.* The rattan core and peel used for weaving and binding furniture shall be of good quality processed from grade rattan poles preferably of the “sika” variety. Rattan core or peel used shall be of uniform diameter or width respectively.
- 3.3 *Wood.* All wood materials used or incorporated into rattan furniture such as seat frames, doors, cabinet, etc. shall conform to PS Specification for Wooden Furniture, Section 3.

4. Construction

- 4.1 All furniture complying with this standard shall be of good workmanship and all components including those not specifically referred to in this standard such as materials used in constructing the metal and wooden parts, springs, cushions, upholstery shall be of a quality at least equal to that used in recognized good practices in the trade.
- (a) Rattan joints for main members and stress joints shall be snugly fitted and secured to adjoin members by nails, screw or bolts, and bound with rattan flat peel or core, or other binding materials glued on to the rattan, so as to withstand normal daily wear and tear.
- (b) All main members and stress joints shall be of the concave-cut fitted type or dowelled type of construction.
- (c) All joints of rattan rings used for the seats or for support purposes shall be the half-lap type nailed and glued together.
- (d) All wood jointings shall follow the PS Specification for Wooden Furniture, Section 4.

5. Finish

- 5.1 All rattan and wood surfaces shall be sanded smooth and all exposed edges and corners shall be eased. All holes, checks and shakes shall be filled and stained or toned to match color of rattan parts. Exposed nails, screws and bolts shall be countersunk with the holes with plastic wood fillers and/or wooden or rattan plugs flushed and sanded smooth before finishing.
- 5.2 Furniture finish shall be in accordance with any of the following:
- (a) lacquer or nitro-based clear finishes;
- (b) cellulose acetate butyrate (CAB);
- (c) acid catalyst clear lacquers;
- (d) polyurethane;
- (e) oil or wax;
- (f) polyester.
- 5.3 All materials used for juvenile furniture shall be of the nontoxic type.
- 5.4 All polished, painted or otherwise finished surfaces shall be of good workmanship and brought to a durable finish.
- 5.5 There shall be no excessive stickiness or surface disfigurement of any type such as blistering, marking or change of color when the furniture is subjected to dry heat. (See Specification for Wooden Furniture PS 821-01.09; 1976).

6. Sampling

- 6.1 Up to three [pieces of] furniture shall be selected at random for testing. Should one of these fail to pass the tests, the inspector may select as many additional [pieces of] furniture as are necessary within reasonable limits, to satisfy himself of the manufacturer's normal standards of production.

7. Performance tests

- 7.1 The main objective of these series of tests is to determine, by the application of simulated loads and related stresses, whether a given manufacturer's products, specifically load-bearing members and joints hereof, can reasonably withstand normal use.
- (a) The manner of testing herein described represents the most simple procedure that has been found workable in a majority of furniture, especially chairs. There will, however, be cases in which the design precludes the use of this particular procedure. In such cases, the

tests to which the furniture are to be submitted shall be derived from the same principle as the standard test, using other means of applying either the same load or loads that have a similar effect.

7.2 Inspection before testing

- (a) Immediately before testing, each sample shall be inspected and any apparent defects noted, so that they shall not later be recorded as having been caused by the tests. A report on such defects shall accompany the report on the performance tests and these shall be taken into account in assessing whether the article has complied with the requirements of this standard.

7.3 Test procedure

- (a) Each sample shall be subjected to the series of tests specified in Section 7.4, the tests being carried out in that sequence.
- (b) If during or after any of the tests described in 7.4 relative movement is apparent between the members of any joint and it is established that the joint is broken in such a way as to impair its serviceability, the furniture shall be deemed to have failed to pass the performance tests.
- (c) If a failure of a joint is recorded, or if for any other reason the furniture selected for testing is deemed to have failed to pass the Performance Tests of this standard, the testing of that article shall be discontinued and no further sections of the test procedure shall be applied to it.
- (d) If any of the tests specified in 7.4 would cause local damage or is inappropriate for any other reason, it shall be replaced by a test or tests based on the same principle (see 7.1).

7.1 Tests

- (a) *Test Samples*. Samples selected at random in accordance with 6.1 shall be tested as specified herein.
- (b) *Level Test (all items)*. Casters or glides shall be removed. Items shall be placed on a flat level surface plate. All legs shall simultaneously rest on the surface plate. Any evidence of rocking when light force is applied at any corner shall be cause for rejection.
- (c) *Sand Bag Test (chairs and sofa frames)*. These items shall withstand six impacts of a 29.5 kg (65 pounds) sand bag, 30.48 cm (12 inches) in diameter at dropped end, a distance of 106.68 cm (3.5 feet) in each of the following locations: (a) directly over a leg, (b) midway between the legs on the side frame members and (c) on front frame rail at midpoint.
- (d) *Impact Test*. Chairs shall withstand 12 drops from a height of 91.44 cm (3 feet) above a concrete floor. The chair shall be tilted to an angle of 12 degrees diagonally across the plane of the feet to insure that one leg receives the initial impact.
- (e) *Diagonal Load Test*. Chair shall be laid back in such a way that the front edge of the seat is directly above the feet or the rear legs. Apply a vertical load of 68.04 kg (150 pounds) to the front edge of the seat. The force shall be applied and completely removed steadily during periods of not less than 5 seconds for 20 times.
- (f) *Static Load Test (chair frame with deck)*. A static load of a 68.04 kg (150 pounds) sand bag shall be applied vertically over a 30.48 cm (12 inches) diameter area in the center of the deck and allowed to remain for 15 minutes. Upon removal of the load, there shall be no evidence of breakage or loosening or separation of frame joints;
- (g) *Static Load Test (tables)*. The height of the table shall be measured accurately. A static load of 45.36 kg (100 pounds) shall be applied vertically over a 30.48 cm (12 inches) diameter area in the centre of the table top and allowed to remain for 30 minutes. Upon removal of the load, the height shall not have decreased by more than 0.31 cm (1/8 inch) and there shall be no evidence of breakage or separation of joints.

7.5 Criteria for success

- (a) No part of the furniture or its components or fittings shall develop any fracture, or any apparent loosening of a joint intended to be rigid, or any deformations which would adversely affect any of its functions.

- (b) Each sample tested shall fulfill the conditions of the test described in 7.3 (b).
- (c) Each sample tested shall sustain each of the forces described in 7.4.

8. Marking

8.1 Each furniture complying with this standard shall be marked with the PS Certification mark.

Note: The use of the PS Certification Mark is governed by the provisions of Standards Administrative Order No. 20, series of 1968, "Rules and Regulations for the Marking of Goods Standardized by the Bureau of Standards and for Other Purposes." This mark on a product/producer is a guarantee that the product is in conformity with the standard. Details of conditions under which a licence to use the PS Certification Mark may be granted are obtainable from the Bureau of Standards, PO Box 3719, Manila.

Appendix VII

A CHRONOLOGY OF MAJOR RATTAN MEETINGS (WITH PROCEEDINGS REFERENCES IF PUBLISHED)

2000. 5–7 December. Rome, Italy. Rattan Development: FAO Expert Consultation organized in collaboration with INBAR (FAO, 2001a; 2002).
2000. 12–22 April. Hainan and Yunnan, China. GTZ/INBAR International Workshop on Bamboo and Rattan. (Zhu, 2001)
2000. 1–3 February. Cameroon. The International Rattan Workshop, Limbe Botanic Garden funded by CARPE. Sunderland and Profizi (2003).
1999. April. Beijing. INBAR Bamboo and Rattan in Member Countries Workshop.
1998. 12–14 May. Kuala Lumpur, Malaysia. Rattan Cultivation: Achievements, Problems and Prospects. An International Consultation of Experts for the Project: Conservation, Genetic Improvement, and Silviculture of Rattans in South-East Asia (Bacilieri and Appanah, 1999).
1996. 14–26 April. Kuching, Sarawak and Luasong, Sabah. Rattan – Taxonomy, Ecology, Silviculture, Conservation, Genetic Improvement and Biotechnology. Training Courses cum Workshops (Rao and Ramanatha Rao, 1997).
1995. 28–30 November. Jogjakarta, Indonesia; April 26–29. Serpong, Indonesia. Bamboo and Rattan Genetic Resources and Use. Second INBAR-IPGRI Biodiversity, Genetic Resources and Conservation Working Group Meeting; Workshop Meeting on Rattan Resources and their Development in Indonesia (Ramanatha Rao and Rao, 1996).
1995. 24–25 August. Manila, Philippines. Third National Rattan Conference (ATI, 1995).
1995. 8–11 May. Los Baños, Philippines. Expert Consultation on Genetic Enhancement of Bamboo and Rattan (Williams *et al.*, 1995).
1995. 27–28 March. Kepong, Selangor, Malaysia. International Meeting of Experts on Inventory Techniques and Assessment of Rattan and Bamboo in Tropical Forests (Williams *et al.*, 1999).
1994. 7–9 November. Singapore. Bamboo and Rattan Genetic Resources and Use. First INBAR Biodiversity, Genetic Resources and Conservation Working Group Meeting (Ramanatha Rao and Rao, 1995).
1994. 9–13 May. Bangalore, India. Consultation on Constraints to Production of Bamboo and Rattan (INBAR, 1994a).
1994. 23–25 February. Serdang, Selangor, Malaysia. Consultative Meeting on Methodologies for Trials of Bamboo and Rattan (INBAR, 1994b).
1993. 6–9 December. Dehra Dun, India. Consultative Meeting on Priority Species of Bamboo and Rattan (Williams and Ramanatha Rao, 1994).
1992. 29–31 January. Trichur, India. Rattan Management and Utilisation: Rattan (Cane) Seminar India (Chand Basha and Bhat, 1993).
1991. 22–26 July. Lae, Papua New Guinea. National Rattan Workshop. (Konabe and Sastry, 1991).
1989. 6–17 March. Jakarta, Indonesia. Workshop on Design and Manufacture of Bamboo and Rattan Furniture, Asia Pacific Region (FAO, 1990).
1988. 1–3 June. Cebu City, Philippines. National Symposium/Workshop on Rattan (PCARRD, 1990).
1987. 12–14 November. Chiangmai, Thailand. Recent Research on Rattans: International

- Rattan Seminar. (Rao and Vongkaluang, 1989).
1987. 19–22 January. Kota Kinabalu, Sabah, Malaysia. Colloquium on Rattan Propagation (Dhanarajan and Manokaran, 1988).
1984. 2–4 October. Kuala Lumpur, Malaysia. Rattan Seminar (Wong and Manokaran, 1985).
1979. 4–6 June. Singapore. Rattan Workshop (IDRC, 1980).

BIBLIOGRAPHY

- Adamson, J. 1993. *American wicker: woven furniture from 1850 to 1930*. New York, Rizzoli.
- Akademika, *Journal of Social Science and Humanities*. 1996. Orang Asli Social Life and Development N° 48 (special issue: six of seven articles on some aspect of rattan).
- Alam, M.K. 1990. *Rattans of Bangladesh*. Chittagong, Bangladesh Forest Research Institute.
- Alth, M. & Alth, C. 1979. *Rattan furniture: a home craftsman's guide*. New York, Hawthorn Books.
- Amatya, S.M. 1997. *The rattans of Nepal*. Kathmandu, IUCN Nepal.
- ATI. 1995. *Proceedings of the third national rattan conference: 24-25 August 1995*. Manila, Appropriate Technology International.
- Bacilieri, R. & Appanah, S. eds. 1999. *Rattan cultivation: achievements, problems and prospects*. Montpellier, France, CIRAD-Forêt.
- Bahadur, M. 1994. *Cane & bamboo crafts of Manipur*. Imphal, India, Mutua Museum.
- Baker, W.J. *et al.* 2000. Phylogeny, character evolution, and a new classification of the Calamoid palms. *Systematic Botany*, 25(2): 297–322.
- Basu, S.K. 1992. *Rattans (canes) in India: a monographic revision*. Kepong, Malaysia, Rattan Information Centre.
- Belcher, B.M. 1999. *The bamboo and rattan sectors in Asia: an analysis of production-to-consumption systems*. Working Paper N° 22. Beijing, INBAR.
- Bhat, K.M. 1991. *A guide to an understanding of rattan structure and behaviour*. Kepong, Malaysia, Rattan Information Centre.
- Bhat, K.M. 1992. *Structure and properties of south Indian rattans*. Peechi, India, Kerala Forest Research Institute.
- Bhat, K.M. 1996. *Grading rules for rattan*. Working Paper N° 6. New Delhi, INBAR.
- Blehaut, J-F. c1995. *Iban baskets*. Kuching, Malaysia, Sarawak Literary Society.
- Burkill, I.H. 1966. *A dictionary of the economic products of the Malay Peninsula*. Kuala Lumpur: Ministry of Agriculture and Cooperatives.
- Chand Basha, S. & Bhat, K.M. eds. 1993. *Rattan management and utilisation*. Peechi, India, Kerala Forest Research Institute.
- Cody, D.P. 1983. *Manual on the production of rattan furniture*. New York, United Nations Industrial Development Organization.
- De Zoysa, N. & Vivekanandan, K. 1991. *The bamboo and rattan cottage industry in Sri Lanka*. Battaramulla, Sri Lanka Forest Department.
- De Zoysa, N. & Vivekanandan, K. 1994. *Rattans of Sri Lanka*. Battaramulla, Sri Lanka Forest Department.
- Dhanarajan, G. & Manokaran, N. eds. 1988. *Proceedings of the colloquium on rattan propagation*. 19–22 January 1987, Kota Kinabalu, Sabah, Malaysia. RIC Occasional Paper N° 5. Kepong, Malaysia, Rattan Information Centre.
- Dransfield, J. 1979. *A manual of the rattans of the Malay Peninsula*. Kuala Lumpur: Forest Department.
- Dransfield, J. 1981. The biology of Asiatic rattans in relation to the rattan trade and conservation. In H. Synge, ed. *The biological aspects of rare plant conservation*, pp. 179–186. London, John Wiley.
- Dransfield, J. 1984. *The rattans of Sabah*. Sabah Forest Record N° 13. Sabah, Forest Department.
- Dransfield, J. 1992. *The rattans of Sarawak*. Richmond, Royal Botanic Gardens.
- Dransfield, J. 1997. *The rattans of Brunei Darussalam*. Brunei Darussalam, Ministry of Industry and Primary Resources.
- Dransfield, J. & Beentje, H. 1996. *Lexicon palmarum*. Marly-le-Roi, France, Editions Champflour.
- Dransfield, J. & Manokaran, N. eds. 1993. *Plant resources of south-east Asia*. 6. *Rattans*. Wageningen, the Netherlands, Pudoc.

- Dunsmore, S. 1983. *Sepak raga (takraw): the South East Asian ball game*. Occasional Paper N° 4. Kuching, Sarawak Museum.
- Duraiappah, A.K. 1994. *A state of the art review on the socio-economics of the bamboo and rattan sector in Southeast Asia*. Working Paper N° 1. New Delhi, INBAR.
- Evans, T.D. et al. 2001. *A field guide to the rattans of Lao P.R.* Kew, UK, Royal Botanic Gardens.
- FAO. 1990. *Proceedings: a workshop on design and manufacture of bamboo and rattan furniture, Asia Pacific Region*. Jakarta, Indonesia, 6–17 March 1989. Field Document N°17. Kuala Lumpur, FAO.
- FAO. 2001a. *Rattan development report: FAO expert consultation*. Rome.
- FAO. 2001b. Rattan. Special issue of *Unasylva*, 52(205).
- FAO. 2002. *Rattan. Current research issues and prospects for conservation and sustainable development*. Non-Wood Forest Products 14. Rome.
- Gnanaharan, R. & Mosteiro, A.P. 1997. *Local tools, equipment and technologies for processing bamboo & rattan*. Technical Report N° 9. New Delhi, INBAR.
- Henderson, A. Galeano, G. & Bernal, R. 1995. *Field guide to the palms of the Americas*. Princeton, USA, Princeton University Press.
- Hodel, D.R. ed. 1998. *The palms and cycads of Thailand*. Thailand, Nong Nooch Tropical Garden.
- IDRC. 1980. *Rattan: a report of a workshop held in Singapore, 4-6 June 1979*. Ottawa, International Development Research Centre.
- IDRC. 1988. *Final report: rattan Indonesia project 1984-1988*. Jakarta: IDRC-Canada and Department of Forestry.
- INBAR. 1994a. *Constraints to production of bamboo and rattan*. Technical Report N° 5. New Delhi, INBAR.
- INBAR. 1994b. *Methodologies for trials of bamboo and rattan*. Technical Report N° 4. New Delhi, INBAR.
- INBAR. 1999. *Socio-economic issues and constraints in the bamboo and rattan sectors: INBAR's assessment*. Working Paper N° 23. Beijing, INBAR.
- INBAR Newsletter/Newsmagazine. 1993+. New Delhi/Beijing, International Centre for Bamboo and Rattan.
- Jones, D.L. 1995. *Palms throughout the world*. Washington, DC, Smithsonian Institution Press.
- Journal of Bamboo and Rattan*. 2001+. The Netherlands, Eindhoven University.
- Kirkup, D. et al. 1999. *The rattans of Brunei Darussalam – interactive key on CD-ROM* Brunei Darussalam, Ministry of Industry and Primary Resources.
- Konabe, C. & Sastry, C.B. eds. 1991. *Proceedings of national rattan workshop*. 22–26 July, 1991. Lae, Papua New Guinea, Forest Research Institute.
- Kong-Ong, H.K. & Manokaran, N. 1986. *Rattan: a bibliography*. Kepong, Malaysia, Rattan Information Centre.
- Lakshmana, A.C. 1993. *Rattans of South India*. Bangalore, India, Evergreen Publishers.
- Lane, R.F. 1986. *Philippine basketry*. Manila, Bookmark.
- Madulid, D.A. 1981. A monograph of *Plectocomia (Palmae: Lepidocaryoideae)*. *Kalikasan – The Philippine Journal of Biology*. 10(1): 1–94.
- Maki, M. 1986. *Rattan work with complete diagrams*. Tokyo, Ondorisha.
- Malayan Naturalist*. 1989. Conservation and utilization of Malaysian palms (special issue), Vol. 43, Nos. 1&2.
- Manokaran, N. 1984. *Indonesian rattans: cultivation, production and trade*. RIC Occasional Paper N° 2. Kepong, Malaysia, Rattan Information Centre.
- Manokaran, N. 1990. *The state of the rattan and bamboo trade*. RIC Occasional Paper N° 7. Kepong, Malaysia, Rattan Information Centre.
- McGuire Rattan with Rawhide Furniture Catalogue*. 1985. San Francisco, The McGuire Company.
- Mohmod, A.L. & Mohamad, S. 1989. *The rattan industries of Peninsular Malaysia*. RIC Occasional Paper N° 6. Kepong, Malaysia, Rattan Information Centre.
- Morakinyo, A.B. 1995. Profiles and Pan-African distributions of the rattan species (*Calamoideae*) recorded in Nigeria. *Principes*, 39(4): 197–209.

- Nasendi, B.D.** 1994. *Socio-economic information on rattan in Indonesia*. Working Paper N° 2. New Delhi, INBAR.
- Negi, S.S.** 1996. *Bamboos and canes*. Dehra Dun, India, Bishen Singh Mahendra Pal Singh.
- Othman, M.S.H. & Bajau, F.E.** 1987. *The profile of the Bumiputra rattan furniture manufacturing industry in Peninsular Malaysia*. RIC Occasional Paper N° 4. Kepong, Malaysia Rattan Information Centre.
- PCARRD.** 1985. *The Philippines recommends for rattan*. Technical Bulletin Series N° 55. Los Baños, Philippine Council for Agriculture, Forestry and Natural Resources Research and Development.
- PCARRD.** 1990. *Rattan: proceedings of the national symposium/workshop on rattan*. Los Baños, Philippine Council for Agriculture, Forestry and Natural Resources Research and Development.
- PCARRD.** 1992a. *Seed technology and nursery techniques*. Rattan How-To Series N° 1. Los Baños, Philippine Council for Agriculture, Forestry and Natural Resources Research and Development.
- PCARRD.** 1992b. *Plantation establishment, maintenance, and harvesting*. Rattan How-To Series N° 2. Los Baños, Philippine Council for Agriculture, Forestry and Natural Resources Research and Development.
- PCARRD.** 1992c. *Chemical treatment, drying, and seasoning of rattan poles*. Rattan How-To Series N° 3. Los Baños, Philippine Council for Agriculture, Forestry and Natural Resources Research and Development.
- PCARRD.** 1992d. *Rattan manufacturing technologies*. Rattan How-To Series N° 4. Los Baños, Philippine Council for Agriculture, Forestry and Natural Resources Research and Development.
- Ramanuja Rao, I.V. et al.** 1990. *Propagation of bamboo and rattan through tissue culture*. Singapore: IDRC.
- Ramanatha Rao, V. & Rao, A.N.** eds. 1995. *Bamboo and rattan genetic resources and use*. Proceedings of the first INBAR biodiversity, genetic resources and conservation working group. 7–9 November 1994, Singapore. Rome, IPGRI.
- Ramanatha Rao, V. & Rao, A.N.** eds. 1996. *Bamboo and rattan genetic resources and use*. Proceedings of the second INBAR-IPGRI biodiversity, genetic resources and conservation working group meeting 28–30 November 1995, Jogjakarta, Indonesia, and report of the workshop meeting on rattan resources and their development in Indonesia, 26–29 April 1995, Serpong, Indonesia. Rome, IPGRI.
- Rao, A.N. & Ramanatha Rao, V.** eds. 1997. *Rattan – taxonomy, ecology, silviculture, conservation, genetic improvement and biotechnology: proceedings of training courses cum workshops, Sarawak, Sabah, 14–26 April 1996*. Serdang, Malaysia, IPGRI-APO.
- Rao, A.N. & Vongkaluang, I.** eds. 1989. *Recent research on rattans*. Bangkok, Faculty of Forestry, Kasetsart University.
- Rattan Information Centre (RIC) Bulletin.** 1982–1993. Kepong, Malaysia, Rattan Information Centre.
- Renuka, C.** 1992. *Rattans of the Western Ghats: a taxonomic manual*. Peechi, India, Kerala Forest Research Institute.
- Renuka, C.** 1995. *A manual of the rattans of Andaman and Nicobar islands*. Peechi, India, Kerala Forest Research Institute.
- Renuka, C.** 2000. *Field identification key for rattans of Kerala*. Peechi, India, Kerala Forest Research Institute.
- Renuka, C. et al.** 1987. *Morphological, anatomical and physical properties of Calamus species of Kerala forests*. Peechi, India, Kerala Forest Research Institute.
- Renuka, C. et al.** 1998. *Genetic diversity and conservation of certain species of rattans in Andaman and Nicobar Islands and southern India*. Peechi, India, Kerala Forest Research Institute.
- Schwartz, H.** *Rattan: tropical comfort throughout the house*. Atglen PA, Schiffer.
- Shim, P.S.** 1995. *Domestication and improvement of rattan*. Working Paper N° 5. New Delhi, INBAR.
- Steiner, H.** *The insect fauna of rattan*. Eschborn, GTZ.

- Sunderland, T.C.H.** [in press]. Indigenous nomenclature, classification and utilisation of African rattans. In L. Maffi, T. Carlson & E. López-Zent, eds. *Ethnobotany and conservation of biocultural diversity*. Advances in Economic Botany. New York, New York Botanical Garden Press.
- Sunderland, T.C.H. & Profizi, J.P.** 2003. *New research on African rattans*. Beijing, INBAR.
- Tan, C.F.** 1992. *Prospects for rattan planting and a field manual for rattan cultivation in the South Pacific*. Port Vila, South Pacific Forestry Development Programme.
- Tuley, P.** 1995. *The palms of Africa*. Cornwall, UK, The Trendrine Press.
- Uhl, N.W. & Dransfield, J.** 1987. *Genera palmarum*. Lawrence, Kansas, USA, International Palm Society.
- Uhl, N.W. & Dransfield, J.** 1999. *Genera palmarum* after ten years. In A. Henderson & F. Borchsenius, eds. *Evolution, variation, and classification of palms*. Memoirs of The New York Botanical Garden, 83: 245–253.
- UNIDO.** 1996. *Design and manufacture of bamboo and rattan furniture*. Vienna, United Nations Industrial Development Organization.
- Wakker, E.J.** 1991. *From cane to cory-set: the economic value and sustainability of rattan trade in Region 2, The Philippines*. Report. Leiden/Cabagan/Nijmegen, Cagayan Valley Programme on Environment and Development.
- Wan Razali, W.M. et al.** eds. 1992. *A guide to the cultivation of rattan*. Kepong, Malaysia, Forest Research Institute Malaysia.
- Wan Razali, W.M. et al.** eds. 1994. *Nursery techniques for rattan*. Technical Report N° 2. New Delhi, INBAR.
- Weiner, G.** 1992. *Zur Stammanatomie der Rattanpalmen*. Doctoral Dissertation, Faculty of Biology, University of Hamburg.
- Williams, J.T. & Ramanatha Rao, V.** eds. 1994. *Priority species of bamboo and rattan*. Technical Report N° 1. New Delhi, INBAR.
- Williams, J.T. et al.** eds. 1999. *Inventory techniques and assessment of rattan & bamboo*. Technical Report N° 11. Beijing, INBAR.
- Williams, J.T. et al.** eds. 1995. *Genetic enhancement of bamboo and rattan*. Technical Report N° 7. New Delhi, INBAR.
- Wong, K.M. & Manokaran, N.** 1985. *Proceedings of the rattan seminar*. 2–4 October 1984. Kuala Lumpur, Malaysia. Kepong, Malaysia, Rattan Information Centre.
- Wulijarni-Soitjpto, N. & Danimihardja, S.** eds. 1995. *Plant resources of south-east Asia. Bibliography 6. Rattans*. Bogor, Indonesia, Prosea.
- Xu, Huangcan et al.** 1996. *Rattan resources of China and current status of conservation*. Working Paper N° 7. New Delhi, INBAR.
- Zhu, Zhaohua.** ed. 2001. *Sustainable development of the bamboo and rattan sectors in tropical China*. Proceedings N° 6. Beijing, INBAR.

COMPENDIUM GLOSSARY ON RATTAN TERMS IN AFRICA

Note: This compendium glossary of terms and definitions used in rattan research and development with a special emphasis on Africa is intended to complement the *Rattan Glossary* through providing additional definitions from the rattan sector in Africa.

RATTAN RESOURCES

BIOLOGY AND SYSTEMATICS

Adaptation	Any morphological, physiological, developmental or behavioural character that enhances survival and reproductive success of an organism.
Allopatric	Species occupying different and disjunct populations.
Aggregate inflorescence	A seemingly single large inflorescence actually comprised of many individual inflorescences. Common in hapaxanthic (q.v.) taxa.
<i>Ancistrophyllum</i>	A synonym of the rattan genus, <i>Laccosperma</i> .
<i>Calamus</i>	A predominantly Asian genus of rattans with a single representative in Africa.
Centre of diversity	The point at which organisms exhibit their greatest diversity.
Cincinnus	A flower cluster wherein each successive flower arises in the axil of the bracteole on the preceding flower stalk.
Congo Basin	The watershed of the Congo River which contains the largest single tract of forest in the world outside of Amazonia.
Endemic	Native to, and restricted to, a particular biogeographical region.
<i>Eremospatha</i>	Genus of rattan endemic to Africa, represented by eleven species.
Exsiccatae	An index of herbarium collections for a particularly taxonomic group usually listed by collector.
Exserted	Protruding beyond the surrounding parts.
Guineo-Congolian	A phytochorion of African vegetation representing the humid lowland forest of the Congo Basin.
Inflorescence unit	A single inflorescence within an aggregated inflorescence (q.v.).
Juvenile	A young individual that may possess morphology distinct from the adult.
<i>Laccosperma</i>	A genus of rattan endemic to Africa represented by six species.
Monospecific	Of a genus, often containing a single species but also often used to describe extensive groups of a single species within a habitat.
Monotypic	Having only one representative.
Neotype	A specimen assigned as the type in the absence of the holotype.
Onococalamineae	Palm subtribe which includes the genus <i>Oncocalamus</i> .
<i>Oncocalamus</i>	A rattan genus endemic to Africa represented by four species.
Polymorphic	Consisting of many forms, highly variable.

Polytypic	Having many representatives.
Sympatric	Species occurring together in the same geographical area.
<i>Terre firma</i>	Land that is not seasonally inundated.
Trilete	Describing a narrow flower opening with three lobes.
Upper Guinea	The forested region from Eastern Nigeria to Guinea.
Vicariance	The existence of closely-related taxa in different geographical areas that have been separated by the formation of a natural barrier.

ANATOMY AND MORPHOLOGY

Aerial branching	The production of shoots in the aerial axils, producing branches.
Aphlebiae	A term formerly used to describe the reduced lowermost leaflets of a rattan that often reflex and clasp the stem.
Attenuate	Drawn out and gradually narrowing.
Baccate	Berry-like.
Basal	At the base of an organ.
Caducous	Falling off early.
“Cat’s claw”	Flagella are often armed with groups of recurved prickles resembling a cat’s claw.
Ciliate	Fringed with long hairs.
Concolorous	Having the same colour throughout.
Cuneate	Wedge-shaped.
Discolorous	Having two or more shades of colour throughout.
Elaminate rachis	A rachis devoid of true leaflets.
Equidistant	Occurring at regular intervals.
Flabellate	Fan shaped.
Geniculus	Technical term for the “knee”.
Inequidistant	Occurring at irregular intervals.
Lanceolate	Lance-shaped.
Lobe	Any division of an organ, particularly if the part is rounded.
Monosulcate	Referring to pollen grains; having a single groove.
Mucilage	A sticky or slimy substance or solution.
Oblanceolate	Inversely lanceolate (q.v.).
Obovate	Inversely ovate (q.v.).
Orbicular	Circular.
Ovate	With an egg-shaped outline.
Orthotropic	Growing directly towards to source of the stimulus (positively orthotropic) or away from the source of the stimulus (negatively orthotropic).
Papillose	Bearing minute rounded projections.

Papyraceous	Thin, membranous, paper-like.
Plumose	Feathery.
Praemorse	Irregularly truncate, appearing as if bitten off at the apex.
Proximal	Situated closest to the point of attachment.
Reflexed	Bent abruptly backwards.
Ruminate	Refers to endosperm, where in-folding of seed coat causes discoloration.
Spathulate	Spatula-shaped.
Spear leaf	The emerging apical leaf.
Striate	Lined.
Trapeziform	Shaped like a trapezium i.e. with only two of its sides parallel.
Truncate	Appearing as if cut off at the base.
Velamen	The outer layer of aerial roots.
Vestigial	Imperfect development of an organ which was fully developed in some ancestral form.
“Wrinkle”	A linear ridge of the ocrea of a number of species of <i>Eremospatha</i> .
Warty	Pitted.

PHYSIOLOGY

Iteroparus	An ecological term synonymous with polycarpy.
Primary axis	The main vegetative structure.
Semelparous	An ecological term synonymous with monocarpy

MANAGEMENT AND PLANTATIONS

Abundance	The total number of individuals of a species in an area (volume, population of community).
Beating up	The replacement of dead seedlings post-planting.
Certification	The process of formal accreditation in recognition of sustainable, ethical and equitable harvest and trade.
Cutting grass	A rodent (<i>Thryonomys swinderianus</i>); the most common pest of rattan in cultivation in Africa.
Inventory	The process of evaluating stocking of a resource.
Natural regeneration	The process by which successive populations replace through reproductive events (recruitment) in natural environmental conditions.
Parent crop	The tree crop used as shade or support.
Permanent sample plots	Permanently demarcated sample plots of variable size, which are enumerated and re-measured at pre-defined intervals to determine changes in ecological and dynamic processes.
Production-to-consumption	A study of the chain of custody of rattan from harvest to the sale of the final product.
Provenance	The place of origin.

Skid trail A linear disturbance in forest where logs have been mechanically dragged through the vegetation.

Stool management The management of individual rattan clusters.

HARVESTING

Community forestry The formal and legally recognized management of forest resources by communities in their proximity.

Customary laws Local rules and regulations applying to the use of forest resource.

Cutlass A sturdy hand-held long blade used throughout Africa.

Harvest regime The prescribed management process by which harvest is controlled to maximize yield while ensuring future supplies.

Harvestable cane length The proportion of the length of a single cane stem of commercial value.

Informal taxation The process by which money changes hands informally (e.g. bribe).

Land tenure The rights of an individual or group to own and manage land.

Libation A ceremony consisting of the sprinkling and drinking of alcohol to appease the ancestors prior to entering the forest. Common throughout West and Central Africa.

Machete Another word for a cutlass (q.v.).

Open-access Unregulated access to a forest resource.

Resource tenure The rights of an individual or group to own and manage a particular resource.

Sloughing Refers to the gradual flaking off of the sheath as the rattan stem matures.

Stranger Common term in Anglophone Africa for a person not from the area.

Sustainable harvest The utilization of a resource in such a way that future supplies are not deleteriously affected.

RATTAN AS A RAW MATERIAL

TRADE

Artisan An individual craftsman.

Cottage industry Often unregulated, small-scale, processing or manufacturing businesses.

Marché des fleurs Central rattan market and processing centre, Douala, Cameroon.

Maryland Central rattan market and processing centre in Lagos, Nigeria.

Mvog-Mbi Central rattan market and processing centre in Yaounde, Cameroon.

Non-timber forest product (NTFP) Forest products other than timber, such as rattan.

TRANSPORT

Head-portering The transportation of products on the head.

PROCESSING

AT LOCAL ARTISANAL LEVEL

<i>Atelier</i> (French)	Workshop.
<i>Cintrage</i> (French)	Word for bending of large-diameter cane using a blow torch.
<i>Raclage</i> (French)	Word from stripping and cleaning the cane.
Raw cane	Natural untreated rattan.
Transformation	All processes applied to rattan stems in order to produce finished goods.
<i>Vannier</i> (French)	Word for weaver, but colloquially referring to artisan.
Weaver	Rattan artisans who are specialised in weaving, especially baskets.

MISCELLANEOUS

African Rattan Research Programme	A research initiative of University College, London and the Royal Botanic Gardens, Kew.
Chewing stick	A vegetative portion of a plant used in dental hygiene.
Domatia	Small structures made by ants on host plants.
Kenja	Common name for traditional rattan farm basket.
Myrmecodomatia	Structures provided by plants for ant colonization.
Hammock bridge	Single-span woven bridges made from rattan cane common in Central Africa.
Herbivory	The consumption of vegetative material by faunal agents.
Hornbills	A group of birds comprised of many species, commonly cited as being the greatest dispersal agent of rattan seed.
Palm heart	The soft growing point in the apical bud which is often edible.
<i>Pradera</i> (Spanish)	Term for deep white sand savannahs characteristic of coastal areas of the Congo Basin.
Predation	The consumption (and often destruction) of seed by faunal agents.
Sanaga River	A well-known biogeographical barrier bisecting Cameroon.
Socio-economic status	Differentiation of farmers according to different wealth categories and social backgrounds.
Yam-ban	Shelf constructed with rattan cane used for storage of yams common in Nigeria.
Yam-tie	Strips of split cane used to tie young yam shoots to supporting poles.

VERNACULAR NAMES

Bantu	The name applied to a group of languages of tribal groups dispersed from SE Nigeria to Kenya and the United Republic of Tanzania and southwards to South Africa.
--------------	--

Eastern Bantu	Tribal groups of the Bantu family occurring in East Africa.
Kinship metaphors	The use of vernacular names for plants that impart relationships to other species.
Niger-Congo	The family of languages that dominates the forest zone from Senegal to Lake Chad.
Non-Bantu	Tribal groups within the Niger-Congo linguistic family (q.v.).
Pidgin English	A corrupted form of English similar to Creole used as form of communication particularly in Anglophone Africa.
Polysemous	A vernacular name for an organism that is the equivalent of a product.
Western Bantu	Tribal groups of the Bantu language family common in sub-Saharan Africa.

THE RATTANS OF AFRICA – SUMMARY OF TAXONOMY AND UTILIZATION¹

Genus	Species	Description	Distribution	Cane use	Non-cane uses
<i>Calamus</i>	<i>deërratus</i> G. Mann & H. Wendl.	Clustering flagellate species; stems to 20 m long up to 35 mm in diameter; leaves ecirrate	Senegal to Angola, west to Uganda	Yes, but only in absence of other, more desirable species	Many
<i>Eremospatha</i>	<i>barendii</i> Sunderland	Clustering; stems to 30m long, up to 25 mm in diameter; conspicuous knee and bracts on inflorescence	Southern Cameroon	None recorded	None recorded
	<i>abrae</i> (De Wild. & Th. Dur.) De Wild.	Clustering; stems to 50 m long, up to 25 mm in diameter; leaflets obovate; papillose inflorescence	Gabon & DR Congo to northern Angola	Yes,	Few
	<i>dransfieldii</i> sp. nov.	Clustering; stems to 30 m, up to 30 mm in diameter; knee conspicuous; lowermost leaflets clasping stem	Upper Guinea forests (Sierra Leone to W. Nigeria)	Yes, particularly traded in Ghana	Few
	<i>cuspidata</i> (G. Mann & H. Wendl.) H. Wendl.	Clustering; stems to 15 m long, 25 cm in diameter; leaflets with conspicuous apiculum	Congo Basin	Few	None recorded
	<i>haullevilleana</i> De Wild.	Clustering; stems to 25 m long, up to 25 mm in diameter; ocrea striate; leaflets spatulate – ovate	Congo Basin	Yes, highly prized and widely traded	Many
	<i>hookeri</i> (G. Mann & H. Wendl.) H. Wendl.	Clustering; stems to 30 m, up to 30 mm in diameter; knee conspicuous, leaflets rhomboid to obovate	Eastern Nigeria to Gabon	No	Few
	<i>laurentii</i> De Wild.	Clustering; stems to 30 m, up to 30 mm in diameter; knee conspicuous; lowermost leaflets clasping stem	Congo Basin with outliers in Upper Guinea forest	Few recorded	None recorded
	<i>macrocarpa</i> (G. Mann & H. Wendl.) H. Wendl.	Clustering; stems to 50 m long, 10–18mm in diameter; juvenile leaves bifid, adult leaflets linear lanceolate	Senegal to DR Congo	Yes, juvenile form reputed to be the best small-diameter cane in Africa. Widely traded	Many
	<i>quinquecostulata</i> Becc.	Clustering; stems to 15 m long, 10 mm in diameter	SE Nigeria to southern Cameroon	Few	None recorded
	<i>tessmanniana</i> Becc.	Clustering; stems to 100 m long (although branching is common), up to 15 cm in diameter; glaucous grey-green leaflets	Southern Cameroon to E. Guinea	None recorded	None recorded
<i>wendlandiana</i> Dammer ex Becc.	Clustering; stems to 60 m, up to 30 mm in diameter; conspicuous knee and rhomboid leaflets	SE Nigeria to Gabon	Yes, but poor quality cane		

¹ Disclaimer: This paper is not a taxonomic work and should not be considered the place of first publication for any new taxon or synonym it contains.

Genus	Species	Description	Distribution	Cane use	Non-cane uses
<i>Laccosperma</i>	<i>acutiflorum</i> (Becc.) J. Dransf.	Clustering; stems to 70 m, up to 60 mm in diameter; yellowish appearance; non-pendulous leaflets	Upper Guinea to DR Congo	None recorded	None recorded
	<i>korupensis</i> sp. nov.	Clustering; stems often branching, to 10 m, up to 15 mm in diameter; acanthophylls absent	Coastal forests of Cameroon	None recorded	None recorded
	<i>laeve</i> (G. Mann & H. Wendl.) H. Wendl.	Clustering; stems often branching, to 10 m, up to 15 mm in diameter; leaflet margins unarmed; seeds smooth	Upper Guinea to DR Congo	None	Few
	<i>opacum</i> (G. Mann & H. Wendl.) Drude	Clustering; stems often branching, to 10 m, up to 15 mm in diameter; leaflet margins armed; seeds warty	Upper Guinea to DR Congo	Yes, but poor quality cane	Few
	<i>robustum</i> (Becc.) J. Dransf.	Clustering; stems to 45 m, 50 mm in diameter; leaflets conspicuously pendulous, glaucous blue-green	SE Nigeria to DR Congo	Yes, highly prized cane; traded widely	Many
	<i>secundiflorum</i> (P. Beauv.) Kuntze	Clustering; stems to 30 m, up to 35 mm in diameter; leaflets sigmoid, dark green	Senegal to DR Congo	Yes, highly prized cane; traded widely	Many
<i>Oncocalamus</i>	<i>macrospathus</i> Burr.	Clustering; stems to 35 m, up to 30 mm in diameter; sheaths well armed; rachillae bright yellow, seeds smooth.	Southern Cameroon to northern Angola	No; poor quality cane	None recorded
	<i>mannii</i> (H. Wendl.) H. Wendl.	Clustering; stems to 30m, 28 mm in diameter, sheaths well-armed; rachillae bright crimson, seeds warty	Southern Cameroon to Gabon	No; poor quality cane	None recorded
	<i>tuleyi</i> Sunderland	Clustering; stems to 30 m, up to 45 mm in diameter, sheaths sparsely or unarmed; seeds smooth	SE Nigera and SW Cameroon	No; poor quality cane	None recorded
	<i>wrightianus</i> Hutch.	Clustering ?; stems to 10 m, up to 10 mm in diameter; leaflets sigmoid	Southern Nigeria	Yes, but for cane rope and twine only	Few

**CROSS-LISTING OF RATTAN GENUS/SPECIES TO VERNACULAR NAMES
BY COUNTRY
(language in parentheses)**

<i>Calamus deërratus</i> G. Mann & H. Wendl.	BENIN: <i>akete</i> (Defi); <i>dekun wéwé</i> (Gun-Gbe) CAMEROON: <i>nding</i> (Bulu) CENTRAL AFRICAN REPUBLIC: <i>biob</i> (Banda-Yangere): CÔTE D'IVOIRE: <i>ailé-mlé</i> (Anyin); <i>gapapa</i> (Godié) DR CONGO: <i>kpude</i> (Zande); <i>ma-ndakele</i> (Ngbaka-Ma'bo); <i>ikonga</i> (Lombo); <i>babio</i> (Mongo-Nkundu); <i>lekwe</i> (BaMbuti) GAMBIA: <i>tambo</i> (Mandinka) GHANA: <i>demmeré</i> (Twi, also trade name); <i>néné</i> , (Akan); <i>ayeka</i> (Anufo); <i>ayeka</i> (Sehwi); <i>keteku</i> (Éwé); <i>ayeké</i> (Nzema) GUINEA: <i>tambo</i> (Mandinka); <i>tābi</i> (Malinke) GUINEA-BISSAU: <i>quitite</i> (Balanta); <i>batanou</i> (Biafada); <i>mantampa de sera</i> (Crioulo, Upper Guinea); <i>tambem</i> (Fulfulde-Pulaar); <i>tambo</i> (Mandinka); <i>ecapate</i> (Mandyak); <i>quito</i> (Papel) EQUATORIAL GUINEA: <i>nzing</i> (Fang) LIBERIA: <i>kpa kala</i> (Mano) NIGERIA: <i>erogbo</i> , <i>erugbo</i> (Edo); <i>ekwe-oji</i> , <i>iye</i> (Igbo); <i>apié</i> (the plant itself, or the cane-rope made from it) (Ijo-Izon), <i>bwálām</i> (a cane) (Pero); <i>erogbo</i> , <i>erugbo</i> (Yoruba) SENEGAL: <i>ki tid</i> (Balanta); <i>kintem</i> (Bainouk); <i>mantampa da sera</i> (Crioulo, Upper Guinea); <i>bu kètao bu ketav</i> , <i>fu fiáf</i> , <i>ka kèt</i> , <i>ka tay</i> , <i>ke hiya</i> , <i>kékiya</i> (Jola-Fogny); <i>tambem</i> (Fula-Pulaar); <i>tambi</i> (Tukulor); <i>tambo</i> (Mandinka); <i>tābi</i> (Malinke); <i>e kapat</i> (Mandyak); <i>ratlan</i> (Wolof) SIERRA LEONE: <i>lumboinyo-lando</i> (Kisi); <i>kanga-mese</i> (Kono); <i>tamba</i> (Loko); <i>tambi</i> (Maninka); <i>tamba</i> (def. <i>tembui</i>) (Mende); <i>tambi</i> (Susu); <i>ra-gbet</i> (Themne); <i>tambu-na</i> (Yalunka) UGANDA: <i>bi-lekwe</i> (Amba)
<i>Eremospatha barendii</i> Sunderland	none recorded
<i>Eremospatha cabrae</i> (De Wild. & Th. Dur.) De Wild.	ANGOLA: <i>m'bamba</i> (Mbundu-Luanda) DR CONGO: <i>li-findo</i> (Lombo); <i>lu-bambi</i> (Kituba); <i>e-safa</i> (Mongo-Nkundu); <i>ki-sakata</i> (Kete) GABON: <i>osono</i> (Tsogo); <i>osono</i> (Pinji); <i>ozono</i> (Myene); <i>li-bamba</i> (Vili); <i>nkolé</i> (Kélé); <i>nkolu</i> (Seki); <i>du-bamba</i> (Barama); <i>du-bamba</i> (Lumbu); <i>ivéta</i> (Duma); <i>iló-lóngo</i> (Kota); <i>u-lóngo</i> (Benga); <i>lé-mbumu</i> (Ndumu); <i>nlong</i> (Fang)
<i>Eremospatha cuspidata</i> (G. Mann & H. Wendl.) H. Wendl.	EQUATORIAL GUINEA: <i>ndera</i> (Fang)
<i>Eremospatha dransfieldii</i> sp. nov.	GHANA: <i>Mfia</i> (Twi) NIGERIA: <i>epa-emele</i> (Yoruba); <i>inima ború</i> (Ijo-Izon) SIERRA LEONE: <i>balu</i> (Kono); <i>mbalu</i> (def. <i>-ui</i>) (Mende); <i>ra-thamp</i> (Themne)
<i>Eremospatha haultevilleana</i> De Wild.	CENTRAL AFRICAN REPUBLIC: <i>pongbo</i> (Ngombe) CONGO: <i>mbaama</i> (Téké) DR CONGO: <i>li-findo</i> (Lombo); <i>mbove</i> (Zande); <i>lu-popi</i> ((Nandi)); <i>n'kele</i> (Bangala); <i>m'bio</i> (Bangi); <i>lo-koli</i> (Kele); <i>ke-kele</i> (Lingala); <i>lu-kodi</i> (Luba-Shari); <i>lu-busi</i> (Tembo); <i>lu-bubi</i> (Lega-Mwenga); <i>yofoko</i> (Mungo-Nkundu); <i>lo-keko</i> (Lusengo); <i>kodi</i> (Luba-Kasai); <i>tukpuru</i> (Bhele) TANZANIA: <i>urugage</i> (Ha) UGANDA: <i>bibbobb</i> (Amba); <i>enga</i> (Luganda)
<i>Eremospatha hookeri</i> (G. Mann & H. Wendl.) H. Wendl.	CAMEROON: <i>ki-yince</i> (Balundu-Bima); <i>mbunden</i> (Bakundu-Balue) EQUATORIAL GUINEA: <i>alua-nlong</i> (Fang) GABON: <i>gigorula</i> (Sira) NIGERIA: <i>itomi</i> (Ekit)

<i>Eremospatha laurentii</i> De Wild.	CAMEROON: <i>kpakpa</i> (Ewondo) CENTRAL AFRICAN REPUBLIC: <i>bo-kondi</i> (Banda-Yangere) DR CONGO: <i>bo-ngale</i> (Mongo-Nkundu); <i>ikonga</i> (Lombo); <i>nkelele mo-none</i> (Lingala); <i>nkoli</i> (Bali) EQUATORIAL GUINEA: <i>ebuat</i> (Fang) SIERRA LEONE: <i>bongei</i> (Mende)
<i>Eremospatha macrocarpa</i> (G. Mann & H. Wendl.) H. Wendl.	BENIN: <i>dekon</i> (Defi); <i>dekun vovo</i> (Gun-Gbe) CAMEROON: <i>filet</i> (Trade); <i>cane rope</i> (Pidgin); <i>echié</i> (Denya); <i>nlong</i> (indef.) <i>melong</i> (def.) (Bulu); <i>bana ndongo</i> = young cane (<i>bana</i> = child) (Balundu-Bima); <i>nloun</i> (Baasa) CÔTE D'IVOIRE: <i>ailè-mlé</i> (Anyin) EQUATORIAL GUINEA: <i>nlong</i> (indef.) <i>mi-long</i> (def.) = juvenile stems, <i>ongam</i> = adult (Fang) GABON: <i>ke-gèma</i> (Lumbu); <i>nyèvila</i> (Sira); <i>ongam</i> (Fang); <i>ndètèse</i> (Kota); <i>iganga-tsungu</i> (Punu); <i>songu</i> (Vumbu); <i>tongo</i> (Tsogo); <i>mbubi</i> (Ndumu) GHANA: <i>mfia</i> (Akan-Asanti); <i>néné</i> (Nzima) LIBERIA: <i>bele de bele</i> (Mano) NIGERIA: <i>ikan</i> (Edo); <i>odu-ana</i> (Igbo); <i>bórú</i> (Ijo-Izon); <i>ukan</i> (Yoruba); <i>ekakieri</i> = male (i.e. with no fruits), <i>irrumka</i> = female (with fruits) (Ekit); <i>iro</i> (Esan) SIERRA LEONE: <i>penden</i> (Kissi); <i>balu</i> (Kono); <i>mbalu</i> (Loko); <i>mbalu, koto mbalu</i> = juvenile (Mende); <i>ra-thamp</i> (Themne)
<i>Eremospatha quinquecostulata</i> Becc.	CAMEROON: <i>calumé-echié</i> (Denya) GABON: <i>di-bula</i> (Sira)
<i>Eremospatha tessmanniana</i> Becc.	CAMEROON: <i>calumé echie</i> (Denya) EQUATORIAL GUINEA: <i>ongam-akot</i> (Fang)
<i>Eremospatha wendlandiana</i> Dammer ex Becc.	CAMEROON: <i>cane basket</i> (Pidgin); <i>mua-echié</i> (Denya) CONGO: <i>ma-bulu</i> (Téké) EQUATORIAL GUINEA: <i>akot</i> (Fang) GABON: <i>égo</i> (Tsogo); <i>ngundju</i> (Punu); <i>ngundju</i> (Vumbu) NIGERIA: <i>eghounka</i> (Ekit)
<i>Laccosperma acutiflorum</i> (Becc.) J. Dransf.	CAMEROON: <i>giant cane</i> (Pidgin) EQUATORIAL GUINEA: <i>ekwass</i> (Fang) NIGERIA: <i>ukpekepe</i> (Ekit)
<i>Laccosperma korupensis</i> sp. nov.	None recorded
<i>Laccosperma laeve</i> (G. Mann & H. Wendl.) H. Wendl.	CAMEROON: <i>ge- nomé-echié</i> = “slave to cane rope” (Denya) CENTRAL AFRICAN REPUBLIC: <i>gao</i> (Banda-Yangere) CÔTE D'IVOIRE: <i>ailé-mla</i> (Anyin) EQUATORIAL GUINEA: <i>ndeke</i> (Fang) GABON: <i>munyengi</i> (Sira); <i>tèkè</i> (Tsogo) GHANA: <i>nguni</i> (Wasa); <i>tenan muhunu</i> = “it lives in the world for nothing” (Twi) NIGERIA: <i>itunibia</i> (Ekit)
<i>Laccosperma opacum</i> (G. Mann & H. Wendl.) Drude	CAMEROON: <i>liko ko'ko</i> = “close to cane” (Mokpwe); <i>ge- nomé-echié</i> = “slave to cane rope” (Denya) CONGO: <i>kimbana ki mukaana</i> (Téké) EQUATORIAL GUINEA: <i>npue-nkan</i> (Fang) GABON: <i>ibulu</i> (Myene); <i>di-bulu</i> (Sira); <i>di-bulu</i> (Lumbu); <i>abulo</i> (Kele); <i>éboa</i> (Tsogo) <i>ulóngó-mwa-iki</i> (Benga) GHANA: <i>eholobaka</i> (Nzema); <i>sayai</i> (Akan-Asanti); <i>edem</i> (Kwawu) NIGERIA: <i>abu</i> (Edo); <i>ekwe oya</i> = cane for tie-tie (Igbo)
<i>Laccosperma robustum</i> (Burr.) J. Dransf.	CAMEROON: <i>eka</i> (Ewondo); <i>nkan, aka</i> = cleaned cane (Bulu); <i>dikah</i> (indef.) <i>mekah</i> (def.) (Bakundu-Balue); <i>gekwiya</i> (Denya); <i>makak</i> (Trade) CENTRAL AFRICAN REPUBLIC: <i>gao</i> (Banda-Yangere) DR CONGO: <i>ekpale-ekpale</i> (Bwa); <i>li-sele</i> (Lombo); <i>nkao</i> (Ngbaka-Ma'bo); <i>ikoonga</i> (Lombo) EQUATORIAL GUINEA: <i>nkan, aka</i> = cleaned cane (Fang) GABON: <i>asperge</i> (nom forestier)

<i>Laccosperma secundiflorum</i> (P. Beauv.) Kuntze	ANGOLA: <i>mi-cau</i> (Mbundu-Luanda) BENIN: <i>kpanon</i> (Defi); <i>kpacha</i> (Gun-Gbe) CAMEROON: <i>ka-kawa</i> (Baka); <i>ekwos</i> (Balundu-Bima); <i>nde-gekwiya</i> (Denya) CONGO: <i>mukaana a nguomo</i> (Téké) CÔTE D'IVOIRE: <i>kumb</i> (Attié); <i>agué</i> (Ebrié); <i>djoho, djolo</i> (Krumen); <i>abika</i> (Anyin); <i>gblé</i> (Godié) DR CONGO: <i>ma-kauw, bo-kauw</i> (def.) (Lingala); <i>bo-nganga</i> (Mongo-Nkundu); <i>nkau</i> (Kongo) GABON: <i>nkan</i> (Fang); <i>nkanda</i> (Kélé); <i>ikandji</i> (Kota); <i>okana</i> (Ndumu); <i>mokangé</i> (Pinji); <i>mokangé</i> (Tsogo); <i>mukanda</i> (Sira); <i>mukanda</i> (Duma); <i>mukanda</i> (Lumbu); <i>nkogu</i> (Myene); <i>nkanyi</i> (Seki) GHANA: <i>willow</i> (Trade); <i>ayié</i> (Akan-Asanti); <i>ayike</i> = large rattan (Nzema) GUINEA-BISSAU: <i>tambem-hadje</i> (Fulfulde-Pulaar); <i>tambendjom</i> (indef.), <i>tambendjom-ô</i> (def.) (Mandinka) NIGERIA: <i>ohwara</i> (Urhobo); <i>okankan</i> = whole cane, <i>ukwen</i> = when split (Edo); <i>òbóng</i> (Efik); <i>ukpé</i> = cane rope made of this species (Ijo-Izon); <i>iga</i> (Ekpeye); <i>añà</i> (Igbo); <i>epe-nla, ikan-ikó</i> = a hook (Yoruba) SENEGAL: <i>ka-likut</i> (Jola-Fogny) SIERRA LEONE: <i>lumboinyo-piando</i> (Kisi); <i>kangane</i> (Kono); <i>kafo</i> (Loko); <i>kavo</i> (def. <i>kavui</i>) (Mende); <i>ka-gbesu</i> = whole stems, <i>e-gbak</i> = leafless part of the stem (Themne)
<i>Oncocalamus macrospathus</i> Burr.	CAMEROON: <i>eboti</i> (Ewondo)
<i>Oncocalamus mannii</i> H. Wendl.) H. Wendl	CAMEROON: <i>mfop n'lon</i> (Bulu) CONGO: <i>mituo</i> (Téké) EQUATORIAL GUINEA: <i>asa-nlong</i> (juvenile), <i>ndoro</i> (adult) (Fang)
<i>Oncocalamus tuleyi</i> Sunderland	CAMEROON: <i>madame</i> (Trade/Pidgin); <i>mo'ap</i> (Balundu-Bima); <i>edju</i> (Bakundu-Balue); <i>moa-echié</i> (Denya) NIGERIA: <i>ibob</i> (Ekit)
<i>Oncocalamus wrightianus</i> Hutch	BENIN: <i>hofle</i> (Defi); <i>gbe-dekun</i> (Gun-Gbe) NIGERIA: <i>akwal'</i> (Igbo); <i>pankéré</i> (Yoruba).

**LIFE FORM AND INTERMEDIATE FOLK CLASSIFICATION OF RATTAN CANES IN
SELECTED AFRICAN LANGUAGE GROUPS**

Folk name (-root)	Language (country)	Language subgroup ²	Ethnobiological category
- <i>ailé</i> (all spp. except large diameter <i>Laccosperma</i> spp.) - <i>ahike</i> (large diameter <i>Laccosperma</i> spp.)	Anyin (Côte d'Ivoire)	non-Bantu	Intermediate Generic
- <i>nwatia</i> (all climbing palms)	Akan-Asanti (Ghana)	non-Bantu	Life form
- <i>dekun</i> (all climbing palms)	Gun-Gbe (Benin)	non-Bantu	Life form
- <i>ikan</i> (all climbing palms)	Edo (Nigeria)	non-Bantu	Life form
- <i>egbèé</i> (all climbing palms)	Yoruba (Nigeria)	non-Bantu	Life form
- <i>kogiri</i> (all climbing palms)	Fulfulde	non-Bantu	Life form
- <i>kwagiri</i> (all climbing palms)	Hausa	non-Bantu	Life form
- <i>uga</i> (all climbing palms)	Igbo (Nigeria)	non-Bantu	Life form
- <i>echié</i> (all spp. except large diameter <i>Laccosperma</i> spp.) - <i>gekwiya</i> (large diameter <i>Laccosperma</i> spp.)	Denya (Cameroon)	Bantu	Intermediate Generic
- <i>edju</i> (<i>Oncocalamus</i> spp.) - <i>ndongo</i> (<i>Eremospatha</i> spp.) - <i>mekah</i> (large diameter <i>Laccosperma</i> spp.)	Oroko language group (Cameroon)	non-Bantu	Generic Generic Generic
- <i>nloun</i> (all spp. except large diameter <i>Laccosperma</i> spp.) -? (large diameter <i>Laccosperma</i> spp.)	Bassa (Cameroon)	Bantu	Intermediate Generic
- <i>mokolo</i> (small diameter canes) - <i>mekah</i> (large diameter <i>Laccosperma</i> spp.)	Bakossi (Cameroon)	Bantu	Intermediate Generic
- <i>nlon</i> (all spp. except large diameter <i>Laccosperma</i> spp.) - <i>nkan</i> (all <i>Laccosperma</i> spp.)	Bulu (Cameroon)	Bantu	Intermediate Generic
- <i>nlong</i> (all spp. except large diameter <i>Laccosperma</i> spp.) - <i>nkan</i> (all <i>Laccosperma</i> spp.)	Fang (Equatorial Guinea & Gabon)	Bantu	Intermediate Generic
- <i>mikaana</i> (all climbing palms)	Téké (Congo)	Bantu	Life form
- <i>kekelé</i> (small diameter canes) - <i>likaw</i> (large diameter <i>Laccosperma</i> spp.)	Zande, Lingala, Swahili-DRC	Bantu	Intermediate Generic

² Bantu linguistics is characterized by the possession of root terms that are distinguished into singular/plural by independent prefixes. These root terms are commonly shared between related languages and it is variation within the prefixes that is reflected in the variation in names for plants, for example.

SELECTED CANE PRODUCTS AND THEIR NOMENCLATURE

Product	Name	Language (country)	Notes
Palm heart	<i>mekah</i> *	Balundu-Bima (Cameroon)	Apex of <i>L. robustum</i>
	<i>baa ndanga</i>	Téké (Congo)	Apex of <i>E. haullevilleana</i>
	<i>mukaana a ngomu</i> *	Téké (Congo)	Apex of <i>L. secundiflorum</i>
	<i>mukaana a buulu</i> *	Téké (Congo)	Apex of <i>E. wendlandiana</i>
	<i>ngodji</i>	Lomdo (DR Congo)	Apex of <i>L. robustum</i>
Cane and cane rope	<i>aka</i>	Fang (Equatorial Guinea)	Cleaned stems of <i>L. robustum</i> / <i>L. secundiflorum</i>
	<i>ukpa</i>	Ijo-Izon (Nigeria)	Split stems of <i>L. secundiflorum</i>
	<i>ukwen</i>	Edo (Nigeria)	Split stems of <i>L. secundiflorum</i>
	<i>ekwe oya</i> *	Igbo (Nigeria)	Split stems of <i>L. opacum</i> for tie-tie
	<i>ekwele / akwala</i>	Igbo (Nigeria)	Split stems of <i>O. wrightianus</i> (coarse cordage)
	<i>udo</i>	Igbo (Nigeria)	Split stems of <i>O. wrightianus</i> (fine twine)
	<i>elili</i>	Igbo (Nigeria)	Split stems of <i>O. wrightianus</i> (string or thread)
	<i>apié</i> *	Igbo (Nigeria)	Cane rope of <i>C. deërratus</i>
Baskets	<i>kenten</i>	Akan-Asanti (Ghana)	Long baskets made from stems of <i>L. opacum</i>
	<i>penja</i>	Bakossi (Cameroon)	All cane baskets
	<i>mbaka</i>	Denya (Cameroon)	Farm baskets made from <i>E. macrocarpa</i>
	<i>bi-dong</i>	Fang (Equatorial Guinea)	Fish baskets made from split stems of <i>L. robustum</i> & <i>E. macrocarpa</i>
	<i>be-koro</i>	Fang (Equatorial Guinea)	Fish traps made from split stems of <i>L. robustum</i> & <i>E. macrocarpa</i>
	<i>nkeuiñ</i>	Fang (Equatorial Guinea)	Farm baskets made from split stems of <i>L. robustum</i> & <i>E. macrocarpa</i>
	<i>maa kutu</i>	Téké (Congo)	Baskets made from <i>E. haullevilleana</i> (<i>baana</i> = small; <i>mwana kutu</i> = medium; <i>kiana</i> = large)

SUMMARY OF THE NON-CANE USES OF AFRICAN RATTANS

Species	Use	Region
<i>Calamus deërratus</i>	Palm heart eaten	Ghana, Sierra Leone
	Young shoots roasted and eaten	Ghana
	Grilled leaves macerated and made into tea to promote weight loss and to treat oedema caused vitamin deficiencies	Senegal
	Ash from burned roots used as salt substitute	Guinea-Bissau
	Sheath twisted and used to clean cooking pans	Ghana
	Sheath twisted to make rope	Nigeria
<i>Eremospatha cabrae</i>	Base of leaf sheath used as a chewstick	DR Congo
<i>E. haullevilleana</i>	Palm heart eaten	Congo
	Fruits used for decoration	DR Congo
	Acanthophylls used as fish hooks	DR Congo
	Sap used as abortifacient	DR Congo
<i>E. macrocarpa</i>	Powdered root used to treat syphilis	Ghana, Nigeria
<i>E. wendlandiana</i>	Palm heart eaten	Congo
	Base of leaf sheath used as a chewstick	Cameroon
<i>Laccosperma laeve</i>	Roasted roots eaten to improve virility	Central African Republic
<i>L. opacum</i>	Sap potable and drunk by forest workers	Gabon
	Palm heart eaten	Congo
<i>L. robustum</i>	Palm heart eaten	Cameroon to Gabon
	Young leaves eaten in stews	Equatorial Guinea
<i>L. secundiflorum</i>	Palm heart eaten	Throughout its range
	Young shoots eaten	Throughout its range
	Sap potable and drunk by forest workers	Senegal, Gabon
	Tea from young shoots used as vermifuge	Ghana, Gabon
	Sap, when mixed with other species, used to treat dysentary	DR Congo
<i>Oncocalamus tuleyi</i>	Base of leaf sheath used as a chewstick	Cameroon
<i>O. wrightianus</i>	Base of leaf sheath used as a chewstick	Nigeria

CURRENTLY RECOGNIZED NAMES AND SYNONYMS FOR AFRICAN RATTANS³

CALAMUS

Calamus deërratus G. Mann & H. Wendl.

EREMOSPETHA

Eremospatha barendii Sunderland.

Eremospatha cabrae (De Wild. & Th. Dur.) De Wild.

syn. *Calamus cabrae* De Wild. & Th. Dur.

Eremospatha rhomboidea Burr.

Eremospatha suborbicularis Burr.

Eremospatha cuspidata (G. Mann & H. Wendl.) H. Wendl.

syn. *Calamus (Eremospatha) cuspidatus* G. Mann & H. Wendl.

Eremospatha dransfieldii sp. nov.

Eremospatha haullevilleana De Wild.

Eremospatha hookeri (G. Mann & H. Wendl.) H. Wendl.

syn. *Calamus (Eremospatha) hookeri* G. Mann & H. Wendl.

Eremospatha laurentii De Wild.

Eremospatha macrocarpa (G. Mann & H. Wendl.) H. Wendl.

syn. *Calamus (Eremospatha) macrocarpus* G. Mann & H. Wendl.

Eremospatha sapini De Wild.

Eremospatha quinquecostulata Becc.

Eremospatha tessmanniana Becc.

Eremospatha wendlandiana Dammer ex Becc.

syn. *Eremospatha korthalsiaefolia* Becc.

LACCOSPERMA

Laccosperma acutiflorum (Becc.) J. Dransf.

syn. *Ancistrophyllum acutiflorum* Becc.

Laccosperma korupensis sp. nov.

³ Disclaimer: This paper is not a taxonomic work and should not be considered the place of first publication for any new taxon or synonym it contains.

Laccosperma laeve (G. Mann & H. Wendl.) H. Wendl.
syn. *Ancistrophyllum laeve* (G. Mann & H. Wendl.) Drude
Calamus (subgen. *Laccosperma*) *laevis* G. Mann & H. Wendl.

Laccosperma opacum (G. Mann & H. Wendl.) Drude
syn. *Ancistrophyllum opacum* (G. Mann & H. Wendl.) Drude
Calamus (subgen. *Laccosperma*) *opacus* G. Mann & H. Wendl.

Laccosperma robustum (Burr.) J. Dransf.
syn. *Ancistrophyllum robustum* Burr.

Laccosperma secundiflorum (P. Beauv.) Kuntze
syn. *Ancistrophyllum secundiflorum* (P. Beauv.) H. Wendl.
Calamus (subgen. *Ancistrophyllum*) *secundiflorus* G. Mann & H. Wendl.
Calamus secundiflorus P. Beauv.
Laccosperma laurentii (De Wild.) J. Dransf.
Ancistrophyllum laurentii De Wild.
Ancistrophyllum majus Burr.

ONCOCALAMUS

Oncocalamus macrospathus Burr.


Oncocalamus mannii (H. Wendl.) H. Wendl.
syn. *Calamus (Oncocalamus) mannii* H. Wendl.
Oncocalamus acanthocnemis Drude
Oncocalamus phaeobalanus Burr.
Calamus niger Braun & Schum.

Oncocalamus tuleyi Sunderland.

Oncocalamus wrightianus Hutch.

BIBLIOGRAPHY

- Defo, L.** 1999. Rattan or porcupine? Benefits and limitations of a high value non-wood forest product for conservation in the Yaounde region of Cameroon. In T.C.H. Sunderland, L.E. Clark & P. Vantomme, eds. *Non-wood forest products of Central Africa: current research issues and prospects for conservation and development*, pp 237–244. Rome, FAO.
- Hédin, L.** 1929. Les rotins au Cameroun. *Rev. Bot. Appl.*, 9: 502-507.
- Minga, M.D.** 2003. L'impact de l'exploitation du rotin sur la préservation de la forêt à Kinshasa, République Démocratique du Congo. In T.C.H. Sunderland & J.-P. Profizi, eds. *New research on African rattans*. Beijing, INBAR.
- Morakinyo, A.B.** 1995. The commercial rattan trade in Nigeria forests. *Trees and People Newsletter*, No. 25.
- Oteng-Amoako, A.A. & Obiri-Darko, B.** 2003. Rattan as a sustainable cottage industry in Ghana: the need for development interventions. In T.C.H. Sunderland & J.-P. Profizi, eds. *New research on African rattans*. Beijing, INBAR.
- Profizi, J.-P.** 1986. Notes on West African rattans. *RIC Bulletin*, 5(1): 1–3.
- Sunderland, T.C.H.** 2001. *The taxonomy, ecology and utilisation of African rattans (Palmae: Calamoideae)*. PhD thesis. Kew, UK, University College, London and Royal Botanic Gardens.
- Sunderland, T.C.H.** [in press]. Indigenous nomenclature, classification and utilisation of African rattans. In L. Maffi, T. Carlson & E. López-Zent, eds. *Ethnobotany and conservation of biocultural diversity*. Advances in Economic Botany. New York, USA, New York Botanical Garden Press.
- Sunderland, T.C.H., Defo, L., Ndam, N., Abwe, M. & Tamnjong, I.** 2003. A socio-economic profile of the rattan trade in Cameroon. In T.C.H. Sunderland & J.-P. Profizi, eds. *New research on African rattans*. Beijing, INBAR.



This volume contains a glossary on terms and terminologies used in the rattan sector. The glossary is structured according to the following major sections: rattan resources (biology, management, plantations, harvesting); rattan as a raw material (transport, storage, grading and post-harvest handling, rattan trade); rattan processing (for local artisanal use and for industrial level furniture manufacturing); and trade in raw rattan, furniture and other products. In order to give special emphasis to the emerging rattan sector in Africa, a separate compilation of terms specifically focusing on those used in Africa is provided.

ISBN 92-5-105095-3 ISSN 1020-3370



9 789251 050958

TC/M/Y5232E/1/03.04/3000