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## Standard Guide for Textile Fibers<sup>1</sup>

This standard is issued under the fixed designation D7641; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

<sup>ε1</sup> NOTE—Editorial changes were made to Annex A1 in August 2014.

### 1. Scope

1.1 This guide lists fibers used to manufacture textile products.

1.2 Specific groups of fibers are identified using tables of standard classification.

1.2.1 Animal fibers are identified by commercial name, biological name, end use, and geographic source.

1.2.2 Vegetable fibers are identified by commercial name, botanical name, staple length or description, and geographic source.

1.2.3 Mineral fibers are identified by commercial name, mineralogical name, chemical description, and geographic source.

1.2.4 Manufactured fibers are identified by commercial name, generic name, and major component.

1.3 Major fiber types used for textile purposes are further classified.

1.3.1 Manufactured fibers are identified as having either an organic base or inorganic base.

1.3.2 Natural fibers are identified as having a cellulosic, protein, or mineral base.

1.4 A glossary of generic names and definitions for manufactured fibers is included as additional information.

### 2. Referenced Documents

2.1 *ASTM Standards*:<sup>2</sup>

D123 *Terminology Relating to Textiles*

2.2 *ISO Standards*:

ISO 2076:1999 (E) *Textiles—Man-made Fibers—Generic Names*

2.3 *Other Documents*:

Code of Federal Regulations, Title 16, Section 303.7

### 3. Terminology

3.1 For definitions of textile terms used in the guide see Terminology D123.

### 4. Significance and Use

4.1 This guide is intended for use as a reference to improve the understanding of the relationship between commercial name, fiber identification and geographical regions of fiber origins that make up the composition of textile products.

4.2 This guide is intended to be used as a source of information only.

4.2.1 Detailed analysis, to verify specific data related to the composition of a particular fiber, may be necessary.

### 5. Animal (Protein Base) Fibers

5.1 See Table 1.

<sup>1</sup> This guide is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.92 on Terminology.

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<sup>2</sup> For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

TABLE 1 Animal (Protein-Base) Fibers

	Commercial and Biological Name <sup>A</sup>	Use	Geographical Regions
ALPACA WOOL	<i>Llama glama</i>	textiles	South America, North America
American ring tail	<i>Bassariscusbacus astutus</i>	soft brushes	North America
Angora	See Rabbit, Angora, Mohair		
Badger	<i>Meles meles</i>	soft brushes	Asia, Europe
	{ <i>Camelus dromedarius</i>	textiles, soft	Asia
	{ <i>Camelus bactrianus</i>	textiles, coarse	Asia
CAMEL HAIR			
"Camel hair"	See Squirrel	soft brushes	Asia, North America
CASHMERE HAIR	<i>Caprahircus sp</i> (Goat)	textiles	Asia
Cattle hair	<i>Bos taurus</i>	upholstery	Asia, Europe
"Civet," "Black Sable"	See Spotted Skunk		
"Fitch"	<i>Mephitis mephitis et al</i> (Skunk)	soft brushes	North America
Fox	<i>Vulpes fulva</i>	stuffing	North America, Europe



TABLE 1 Continued

Commercial and Biological Name <sup>A</sup>		Use	Geographical Regions
Genet	<i>Genetta</i>	soft brushes	Africa, Asia, Europe
Goat hair	<i>Capra sp</i>	soft brushes	Asia
Hog bristle	<i>Sus scrofa</i>	paint brushes	Asia, North America
Horse hair, body	<i>Equus caballus</i>	upholstery, felts	Asia, Europe, North America, South America
Horse hair, mane and tail	<i>Equus caballus</i>	upholstery	Asia, Europe
Kolinsky	See Sable, red		
LLAMA WOOL	<i>Llama glama</i>	textiles	South America
Mink	See Sable, red		
MOHAIR	<i>Capra hircus</i> (Angora goat)	textiles	Asia, Africa, North America
Muskrat, Northern	<i>Ondatra zibethicus</i>	textiles	North America, Russia
Muskrat, Southern	<i>Ondatra rivalicia</i>	textiles	North America
Ox hair, ear	<i>Bos taurus</i>	soft brushes	Asia, Europe, North America
Pony	<i>Equus caballus</i>	soft brushes, felts	Asia
RABBIT, COMMON	<i>Oryctolagus cuniculus</i>	fur felt	Australia, Europe, Asia, North America
RABBIT, ANGORA	<i>Oryctolagus cuniculus</i>	textiles	Europe, North America
Sable, red	<i>Mustela sibirica</i> (Kolinsky, China Mink, Jap Mink)	soft brushes, stuffing	Asia
SHEEP WOOL	<i>Ovis aries et al.</i>	textiles	all continents
Skunk	See "Fitch"		
Skunk, Spotted	<i>Spilogale sp</i>	soft brushes	North America
Squirrel	<i>Sciurus vulgaris et al.</i>	soft brushes	Asia, North America
SILK	<i>Bombyx mori</i>	textiles	Asia, Europe
SILK, TUSSAH	<i>Antheraea paphia et al.</i>	textiles	Asia
VICUNA WOOL	<i>Lama vicugna</i>	textiles	South America

<sup>A</sup> The most common names are in capital letters; biological names are in italics.

## 6. Vegetable Fibers

### 6.1 See Tables 2-4.

TABLE 2 Vegetable Fibers: Seed and Fruit-Hair

NOTE 1—The physical origins and the botanical classifications in Tables 2-4 were reviewed by the U.S. Department of Agriculture.

Commercial and Botanical Name <sup>A</sup>		Staple Length, in.	Geographical Regions
Akund	<i>Calotropis gigantes</i>		Asia
COTTON	<i>Gossypium, various sp</i>		
1. American Upland	<i>Gossypium sp</i>		
2. Asiatic cultivated	<i>Gossypium hirsutum</i>	¾ to 1 7/16	all continents
a. Chinese	<i>Gossypium arboreum</i>	¾ to 1	China
b. Indian	<i>Gossypium arboreum</i>	¾ to 1	India
	<i>Gossypium herbaceum</i>		
c. Levantine	<i>Gossypium herbaceum</i>	1/2 to 1	Asia
3. Extra-long staple barbadenses:			
a. Egyptian	<i>Gossypium barbadense</i>	1 1/8 to 1 5/8	Egypt, Sudan, Peru
b. American Egyptian	<i>Gossypium barbadense</i>	1 3/8 to 1 1/2	United States
c. Sea Island	<i>Gossypium barbadense</i>	1 1/2 to 2	West Indies
4. Medium staple, semi-rough barbadenses:			
a. Tanguis	<i>Gossypium barbadense</i>	1 1/8 to 1 1/4	Peru
b. Ishan	<i>Gossypium barbadense</i>	1 1/8 to 1 1/4	West Africa
c. Ashmouni (uppers)	<i>Gossypium barbadense</i>	1 1/16 to 1 1/8	Egypt
5. Short staple, rough barbadenses:			
a. Iquitos	<i>Gossypium barbadense</i>	1 to 1 1/16	Peru
b. Lengupa	<i>Gossypium barbadense</i>	1 5/16 to 1 1/16	Colombia
6. Perennial tree cottons:			
a. West Indian	<i>Gossypium hirsutum var Marie-Galante</i>	1 1/8 to 1 3/8	West Indies
b. Sertao and Serido	<i>Gossypium hirsutum var Marie-Galante</i>	1 1/8 to 1 3/8	Brazil
KAPOK	<i>Ceiba pentandra</i>	¾ to 1 ¼	Tropics
Milkweed Floss	<i>Asclepias various sp</i>	¾ to 1 ¼	North America
Ozone fiber	<i>Asclepias sp incarnata</i>		United States
Pochote	<i>Ceiba aesculifolia</i>		Mexico
Samchu	<i>Chorisia species</i>		South America

<sup>A</sup> Preferred or most common names are in capital letters; botanical names are in italics. The abbreviation *sp* is for the word "species," the subdivisions of a genus.

**TABLE 3 Vegetable Fibers: Bast and Leaf**

Commercial and Botanical Name <sup>A</sup>	Description	Geographical Regions
ABACA <i>Musa textilis</i> Neé	hard leaf fiber	Philippine Islands, Central America, Borneo, Sumatra
<i>Abutilon avcennae</i> Gaertn	See <i>Abutilon theophrasti</i> Medic medii	
<i>Abutilon longicuspe</i>	Zada buack	coarse bast fiber
<i>Abutilon periplocifolium</i>	Maholtine	coarse bast fiber
<i>Abutilon theophrasti</i> Sweet Medic medii	CHINESE JUTE	coarse bast fiber
<i>Aechmae magdalenae</i> André	<i>Pita floja</i>	China Central and South America
AFRICAN SISAL <i>Agave sisalana</i> , Perrine & Engelm	hard leaf fiber	
<i>Agave cantala</i> Roxb	CANTALA	hard leaf fiber
<i>Agave cocui</i> Trel	Dispopo	coarse leaf fiber
<i>Agave hexapetala</i> Jacq	Cocuiza	coarse leaf fiber
<i>Agave deweyana</i> Trel	Zapupe larga	hard leaf fiber
<i>Agave falcata</i> Engelm	Guapilla	hard leaf fiber
<i>Agave fourcroydes</i> Lem	HENEQUEN	coarse leaf fiber
<i>Agave funkiana</i> Koch & Bouché	JAUMAVE ISTLE	hard leaf fiber
<i>Agave lespinassei</i> Trel	Zapupe fuerte	hard leaf fiber
<i>Agave letonae</i> F. W. Taylor	SALVADOR SISAL	coarse leaf fiber
<i>Agave lophanta</i> var. <i>poselgeri</i> (Salm-Dyck) Berger	TULA ISTLE	hard leaf fiber
<i>Agave pesa-mulae</i> Trel	Pata de mula, pie de mula	hard leaf fiber
<i>Agave pseudotequilana</i> Trel	Mescal	hard leaf fiber
<i>Agave sisalana</i> Perrine & Engelm	SISAL	hard leaf fiber
<i>Agave striata</i> Zucc	Espandinin	hard leaf fiber
<i>Agave tequilana</i> Weber	MESCAL	hard leaf fiber
<i>Agave zapupe</i> Trel	ZAPUPE	hard leaf fiber
Ake-ire	<i>Urenia lobata</i> Cav	bast fiber
Aloes creole		
Aloes fiber		
Aloes malgache	See <i>Furcraea gigantea</i> Vent true aloe is not a fiber plant	
Ambari	<i>Hibiscus cannabarius</i> L	coarse bast fiber
<i>Ananas comosus</i> L. (Merr)	PINEAPPLE FIBER	fine leaf fiber
<i>Apocynum</i> sp	Kendyr	soft bast fiber
Aramina	<i>Urenia lobata</i> Cav	bast fiber
Arghan	<i>Aechmea magdalenae</i> André	
<i>Asclepias incurvata</i> L	Swamp milk weed	soft bast fiber
Awasthe hemp	<i>Hibiscus cannabarius</i> L (not hemp)	bast fiber
Bamia	<i>Urenia lobata</i> Cav	
BANANA	<i>Musa sapientum</i> L	leaf fiber
Banana yucca	<i>Yucca mohavensis</i> Sarg	
Ban ochra	<i>Urenia lobata</i> Cav	
Bariala	<i>Sida micrantha</i> Schrank	
Barreta	<i>Samuela carnerosana</i> Trel	
BEAR GRASS	<i>Nolina</i> sp, <i>Yucca</i> sp	
Benares hemp	<i>Crotalaria juncea</i> L (not hemp)	
Benares sunn	<i>Crotalaria</i>	
<i>Billbergia infuscata</i> <sup>B</sup>	Infuscata	soft leaf fiber
Bimli jute		South America
Bimli patam }	<i>Hibiscus cannabarius</i> L (not jute)	
<i>Boehmeria nivea</i> (L) Gaud	RAMIE, China grass	soft bast fiber
Bolo-bolo	<i>Urenia lobata</i> Cav	
Bombay aloe	<i>Furcraea gigantea</i> Vent (not true aloe)	
Bombay hemp	<i>Crotalaria juncea</i> L (not hemp)	
Bowstring hemp	<i>Sansevieria</i> sp (not hemp)	
Brazilian jute	<i>Corchorus</i> sp ( <i>Hibiscus</i> and <i>Urenia</i> are not jute)	
<i>Bromelia magdalenae</i>	See <i>Aechmea magdalenae</i> André	
<i>Bromelia karatas</i> L	Gravata	soft leaf fiber
<i>Bromelia laciniosa</i> Mart & Schult	Macambira	soft leaf fiber
<i>Bromelia longissima</i>	<i>Aechmea magdalenae</i> André	soft leaf fiber
<i>Bromelia sagenaria</i>	<i>Pseudaranus sagenarius</i> (Arruda) Camargo	soft leaf fiber
Broom fiber	<i>Cystisus scoparius</i> (L) Link, and/or <i>Spartium junceum</i> L	
Brown hemp	<i>Crotalaria juncea</i> L (not hemp)	
Cabulla	<i>Furcraea cabuya</i> Trel	
Cabuya	<i>Furcraea cabuya</i> Trel	
Cabuya blanca		
Cabuya blancho		
Cabuya sin espina	<i>F. cabuya</i> var. <i>integra</i> Trel	
Cadillo		
Caesar weed }	<i>Urenia lobata</i> Cav	
<i>Calotropis gigantea</i> Dry & Ait	Akund	



TABLE 3 Continued

Commercial and Botanical Name <sup>A</sup>	Description	Geographical Regions
Canamo		
Canamo }	Spanish word for hemp	
Candilla		
Candillo }	<i>Urena lobata</i> Cav	
Canhamo	<i>Urena lobata</i> Cav	
<i>Cannabis sativa</i> L	HEMP	soft bast fiber all temperate zones
CANTALA	<i>Agave cantala</i> Roxb; differs from maguey in retting	
CAROA, <i>Carua</i>	<i>Neoglaziova variegata</i> Mez	
Carrapicho	<i>Urena lobata</i> Cav	
Cebu hemp	<i>Musa textilis</i> Née (not hemp)	
CEBU MAGUEY	<i>Agave cantala</i> Roxb (retted differently from Cantala)	
<i>Cephalonema</i> sp	Punga	bast fiber Belgian Congo
Chanvre	French word for hemp	
Chaparral yucca	<i>Hesperoyucca whipplei</i> (Torr) Trel	
China grass	<i>Boehmeria nivea</i> (L) Gaud	
CHINESE JUTE	<i>Abutilon theophrasti</i> Medic Medii	
Chingma	<i>Abutilon theophrasti</i> Medic	
Chino azul	<i>Agave tequilana</i> Weber	
Chino bermejo	<i>Agave palmaris</i> Trel	
Chique-chique	<i>Leopoldinia piassaba</i> Wallace& Archer	
Chuchao	<i>Furcraea andina</i> Trel	
Coconada hemp	<i>Crotalaria juncea</i> L (not hemp)	
Cocuiza	<i>Furcraea humboldtiana</i> Trel <i>F hexapetala</i> , (Jacq) Urb	
Cocuiza mansa	<i>Furcraea gigantea</i> Vent	
CONGO JUTE	<i>Urena lobata</i> Cav (not jute)	bast fiber Belgian Congo, Brazil, Argentina, Venezuela, Cuba
<i>Corchorus capsularis</i> L	JUTE (white jute)	soft bast fiber Pakistan, India
<i>Corchorus olitorius</i> L	TOSSA, DAISEE (jutes)	soft bast fiber Pakistan, India
Cousin rouge	<i>Urena lobata</i> Cav	
<i>Crotalaria juncea</i> L	SUNN (not hemp)	hard bast fiber India
Cuban jute	<i>Urena</i> sp. <i>Malva</i> sp <i>Sida</i> sp (not jute)	
Cuban sisal	<i>Agave fourcroydes</i> Lem	
Culut culutan	<i>Urena lobata</i> Cav	
<i>Cytisus scoparius</i> (L) Link	Broom fiber, Spanish broom	soft bast fiber Italy, Spain
Da	<i>Hibiscus cannabinus</i> L	
DAISEE JUTE	<i>Corchorus olitorius</i> L	
Davao hemp	<i>Musa textiles</i> Née (not hemp)	
Deccan hemp	<i>Hibiscus cannabinus</i> (not hemp)	
Dha	<i>Hibiscus cannabinus</i> L	
Dispopo	<i>Agave cocui</i> Trel	
Ensete edulis (Gmel) Horan	<i>Musa ensete</i> Gmel	
Escobilla	<i>Sida</i> sp	
Espadinum	<i>Agave striata</i> Zucc	
FIQUE	<i>Furcraea macrophylla</i> Baker	
Flax	<i>Linum usitatissimum</i> L	soft bast fiber Argentina, Australia, Belarus, Belgium, Brazil, Bulgaria, Canada, Chile, China, Czech Republic, Egypt, Estonia, France, Germany, Hungary, India, Ireland, Italy, Latvia, Lithuania, Netherlands, New Zealand, Poland, Romania, Russia, Ukraine, United States, Yugoslavia
FORMIO	<i>Phormium tenax</i> Forst	
French hemp	<i>Cannabis sativa</i> L	
<i>Furcraea andina</i> Trel	Chuchao	hard leaf fiber Ecuador
<i>Furcraea cabuya</i> Trel	Cabuya	hard leaf fiber Central America
<i>Furcraea cubensis</i>	Cabulla	hard leaf fiber Haiti, Cuba, Venezuela, Dominican Republic
<i>Furcraea geminispina</i> Jacobi	Cocuiza	hard leaf fiber Venezuela
<i>Furcraea gigantea</i> Vent	Piteira, cocuiza mansa	hard leaf fiber Mauritius, Venezuela, Brazil, Tropics
<i>Furcraea hexapetala</i> (Jacq) Urb	<i>Furcraea cubensis</i>	hard leaf fiber Haiti, Cuba, Venezuela, Dominican Republic
<i>Furcraea humboldtiana</i> Trel	Cocuiza	hard leaf fiber Venezuela
<i>Furcraea macrophylla</i> Baker	FIQUE	hard leaf fiber Colombia
Galla	<i>Musa ensete</i> - <i>Ensete edulis</i> (Gmel) Horan	
Gambo hemp	<i>Hibiscus cannabinus</i> L (not hemp)	
Gombo hemp	<i>Hibiscus cannabinus</i> L (not hemp)	
Grand cousin	<i>Urena lobata</i> Cav	
Grand mahot cousin	<i>Urena lobata</i> Cav	
Gravata	<i>Bromelia Karatus</i> L	
Guapilla	<i>Agave falcata</i> Engelm	
GUAXIMA	<i>Urena lobata</i> Cav	
Guaxima roxa	<i>Urena lobata</i> Cav	
Guaxima vermehla	<i>Urena lobata</i> Cav	



TABLE 3 Continued

Commercial and Botanical Name <sup>A</sup>	Description	Geographical Regions
Guiazo HAITIAN SISAL Hanf	<i>Urena lobata</i> Cav <i>Agave sisalana</i> Perrine & Engelm German word for hemp	Austria, Bulgaria, Chile, China, Germany, Hungary, Italy, Poland, Romania, Russia, Syria, United States, Yugoslavia
HEMP HENEQUEN Hennup <i>Hesperaloe funifera</i> (Koch) Trel <i>Hesperoyucca whipplei</i> (Torr) Trel <i>Hibiscus cannabinus</i> L	<i>Cannabis sativa</i> L <i>Agave fourcroydes</i> Lem Dutch word for hemp ZAMANDOQUE YUCCA KENAF, MESHTA, Ambari, Bimlipatam, Awasthe, Deccan, Dha, Gambo	Mexico United States Russia, Persia, India, South America, United States, Cuba
<i>Hibiscus abelmoschus</i> L <i>Hibiscus esculentus</i> L <i>Hibiscus ferax</i> Hook <i>Hibiscus kitaibelifolius</i> St Hil <i>Hibiscus radiatus</i> <sup>C</sup> <i>Hibiscus sabdariffa</i> L Ifé hemp Ifé Indian hemp (United States) Indian hemp (India)	Musk hemp Ochra MESHTA Juta paulista Papoula de St Francis ROSELLA <i>Sansevieria</i> sp (not hemp) <i>Apocynum cannabinum</i> L (not hemp) Several unrelated plants (not hemp) <i>Crotalaria</i> sp and <i>Hibiscus</i> sp (Examples are Ambari, Benares hemp, Itarsi, Sunn)	India United States India, Brazil Brazil Brazil Java, Brazil
Infuscata ISTLE IXTLE } Istle Jaumave Istle, Palma Istle Pita Istle Tula	<i>Billbergia infuscata</i> <sup>B</sup> Several <i>Agave</i> sp (word is a generic Mexican term) <i>Agave funkiana</i> Koch & Bouché <i>Samuela carerosana</i> Trel <i>Yucca treculeana</i> Carr <i>Agave lophanta</i> var <i>poselgeri</i> (Salm-Dyck) Berger	
Itarsi hemp Ixtli JAUMAVE ISTLE Jaumave	<i>Crotalaria juncea</i> L (not hemp) <i>Hesperaloe funifera</i> (Koch) Trel	
Jaumave lechiguilla JAVA CANTALA	<i>Agave funkiana</i> Koch & Bouché <i>Agave cantala</i> Roxb different retting from maguey	
Java jute JAVA SISAL Jirica Jubblepore hemp Juta paulista JUTE	<i>Hibiscus sabdariffa</i> L (not jute) <i>Agave sisalana</i> Perrine & Engelm <i>Nolina</i> sp <i>Crotalaria juncea</i> L (not hemp) <i>Hibiscus kitaibali folius</i> St Hil <i>Corchorus capsularis</i> L and <i>Corchorus</i> <i>olitorius</i> L	
KENAF Kendyr KENTUCKY HEMP Lechuguilla (Tula istle)	<i>Hibiscus cannabinus</i> L <i>Apocynum</i> sp <i>Cannabis sativa</i> L <i>Agave lophanta</i> var <i>poselgeri</i> (Salm-Dyck) Berger	
Letona Linen Luffa gourd Luffa	<i>Agave letonae</i> F. W. Taylor See Flax <i>Linum usitatissimum</i> L <i>Luffa</i> sp	
Loofah Macambira Madagascar bass Madras hemp Maguey	<i>Bromelia laciniosa</i> Mart & Schultz L <i>Vonitra</i> sp <i>Crotalaria juncea</i> L (not hemp) Latin American term applied to many species of <i>Agave</i>	
MAGUEY (CEBU) Maguey (Peru) Maguey (Cuba) Maholtine Malva	<i>Agave cantala</i> Roxb <i>Furcraea macrophylla</i> Baker <i>Furcraea hexapetala</i> (Jacq) Urb <i>Abutilon periplocifolium</i> Sweet Latin American term applied to several <i>Malvaceae</i>	
MALVA Malva blanca Malva listro Malva risco }	<i>Sida micrantha</i> Schrank <i>Urena lobata</i> Cav <i>Sida micrantha</i> Schrank	



TABLE 3 Continued

Commercial and Botanical Name <sup>A</sup>	Description	Geographical Regions
Malva roxa	<i>Urena lobata</i> Cav	
Malva velluda	<i>Malache malacophylla</i> (Néc & Mart) Stand	
Malvas	<i>Urena lobata</i> Cav	
Manila	<i>Musa textilis</i> Née (not hemp)	
Manila hemp	<i>Musa textilis</i> Née (not hemp)	
Manila maguey	<i>Agave cantala</i> Roxb	
Mano largo	<i>Agave palmaris</i> Trel	
Mauritius hemp	<i>Furcraea gigantea</i> Weber (not hemp)	
Mazatlan hemp	<i>Agave tequilana</i> Weber (not hemp)	
MESCAL	Fibre mixture, <i>Agave sp</i>	
Mescal maguey	<i>Agave tequilana</i> Weber	
MESHTA	<i>Hibiscus cananbinus</i> L H <i>ferax</i> Hook	soft bast fiber India
Mexican sisal	<i>Agar fourcroydes</i> Lem	
Milkweed fiber	<i>Asclepias sp</i> (bast)	bast fiber, also (see Sec. I) seed hair
Moorva	<i>Sansevieria sp</i>	
Musk hemp	<i>Hibiscus abelmoschus</i> L (not hemp)	
<i>Musa ensete</i> Gmel	<i>Ensete edulis</i> (Gmel) Horan	coarse leaf fiber Ethiopia
<i>Musa sapientum</i> L	Banana fiber	coarse leaf fiber Tropics
<i>Musa textilis</i> Née	ABACA, manila	coarse leaf fiber Philippine Islands, Borneo, Sumatra
Nanas sabrong	<i>Agave cantala</i> , Roxb	
Natal hemp	<i>Furcraea gigantea</i> Vent (not hemp)	
<i>Neoglaziovia variegata</i> Mez	CAROA caraua	hard leaf fiber Brazil
New Zealand flax	<i>Phormium tenax</i> Forst phormium or formio	
New Zealand hemp }	(not flax or hemp)	
<i>Nolina sp</i>	BEAR GRASS	hard leaf fiber Southwest United States, Mexico
Ochra	<i>Hibiscus esculentus</i> L	
Olona	<i>Touchar dia latifolia</i> Gaud	
Ototo grande	<i>Urena lobata</i> Cav	
Paka	<i>Urena lobata</i> Cav	
Palma	<i>Samuela carnerosana</i> Trel	
Palma barreta	<i>Samuela carnerosana</i> Trel	
PALMA ISTLE }		
Palmilla	<i>Yucca elata</i> Engelm	
Palmyra	<i>Borassus flabellifer</i> L	
Panama hat palm	<i>Carludovica palmata</i> R & P (not a palm)	
Pangane	<i>Sansevierid Kirkii</i> Bak (not hemp)	
Pangane hemp		
Papoula de St Francis	<i>Hibiscus ferax</i> Hook	
Pata de mula	<i>Agave pes-mulae</i> Trel	
Pavonia malacophylla Wright		
Pavonia schimperiana Hochst & A. Rich		
Pavonia tomentosa Hochst & A. Rich	<i>Malva relludo</i> UACIMA	bast fiber Brazil
Phillibit black hemp	<i>Crotalaria juncea</i> L ( <i>C tenuifolia</i> Roxb) (not hemp)	
Philippine maguey	<i>Agave cantala</i> Roxb	
PHORMIUM	<i>Phormium tenax</i> Forst	
<i>Phormium tenax</i> Forst	PHORMIUM	hard leaf fiber Argentina, Chile, New Zealand, St. Helena
Pie de mula	<i>Agave pes-mulae</i> Trel	
Pineapple fibre (pina)	<i>Ananas comosus</i> (L) Merr	
Pineapple (wild)	<i>Aechmea magdalenae</i> André	
Pita	Latin-American name for many different hard fibers	
Pita floya (floia)	<i>Aechmea magdalenae</i> André	
PITA ISTLE	<i>Yucca treculeana</i> Carr	
Pita palma }		
PITEIRA	<i>Furcraea gigantea</i> Vent	
Pitre (peepray)	<i>Furcraea hexapetala</i> (Jacq) Urb	
POEPOES	<i>Agave cantala</i> Roxb	
Polompom	<i>Thespesia lampas</i> Dalz & Dalz & Gibs	
Pochote	<i>Ceiba aesculifolia</i> (H.B.K.) Britt & F. G. Bak	
Pseudananas sagenarius (Arruda)		
Camargo	<i>Bromelia sagenaria</i>	soft leaf fiber Brazil
Punga	<i>Cephalonema sp</i>	bast fiber Belgian Congo
Queensland hemp	<i>Sida rhombifolia</i> L (not hemp)	
RAMIE	<i>Boehmeria nivea</i> L Gaud	
RATTAN	<i>Calamus sp</i>	
Rhea	<i>Boehmeria nivea</i> L Gaud	
ROSELLE, rosella	<i>Hibiscus sabdariffa</i> L	
Samandoca	<i>Hesperaloe funifera</i> (Koch) Trel	
<i>Samuela carnerosana</i> Trel	PALMA ISTLE	leaf fiber Mexico
Salvador henequen	<i>Agave letonae</i> F. W. Taylor	
SAN SALVADOR SISAL }		