

Supplementary Table 4. List of C₄ plants with economic importance in SW Asia including non-native cultivated or introduced species

Species	Utilization	Area of cultivation	Reference
Monocots Cyperaceae			
<i>Cyperus alopecuroides</i> Rottb.	Mat-making	Egypt	(Hanelt, 2001)
<i>Cyperus alternifolius</i> R.Br.	Ornamental, Mat-making	Worldwide	('Missouri Botanical Garden - Plant Finder - <i>Cyperus alternifolius</i> "Variegatus"'; Hanelt, 2001)
<i>Cyperus articulatus</i> L.	Essential oil, tubers, construction, traditional art, medicine, mat making	Africa	(Simpson and Inglis, 2001; Atala, 2012)
<i>Cyperus corymbosus</i> L.	Mat making, fibre	SE and S Asia	(Ravichandran et al., 2005; Toderich et al., 2007)
<i>Cyperus esculentus</i> L. and other stoloniferous <i>Cyperus</i> sp. (see note 1)	Edible tubers, comestible oil, biodiesel	Worldwide	(Pascual et al., 2000; Hanelt, 2001; Simpson and Inglis, 2001; Arafat et al., 2009)
<i>Cyperus exaltatus</i> Retz.	Mat-making, Fibre, Tubers	Korea, Japan	(Hanelt, 2001; Simpson and Inglis, 2001)
<i>Cyperus malaccensis</i> Lam.	Fibre, construction, mat weaving	Tropical and subtropical Asia	(Ravichandran et al., 2005; Shioya et al., 2019)
<i>Cyperus pangorei</i> Rottb.	Fibre, construction, mat weaving	Tropical and subtropical Asia	(Ravichandran et al., 2005; Jana and Puste, 2014)
<i>Cyperus papyrus</i> L.	Papyrus/paper, bioenergy, construction, ornamental, mat-making, young stems and rhizomes as vegetable	Worldwide	(Duke, 1983; Hanelt, 2001; Simpson and Inglis, 2001)
<i>Fimbristylis umbellaris</i> (Lam.) Vahl	Weaving	SE Asia	(Hanelt, 2001)
Poaceae			
<i>Anthephora pubescens</i> (Steud.) Nees	Forage/Fodder	Australia	(Hanelt, 2001)
<i>Arthraxon prionodes</i> (Steud.) Dandy	Forage/Fodder	India	(Hanelt, 2001)
<i>Bothriochloa bladhii</i> (Retz.) S.T. Blake	Forage/Fodder, Erosion control	Throughout Subtropics, India, USA	(Hanelt, 2001)
<i>Bothriochloa ischaemum</i> (L.) Keng	Forage/Fodder, Erosion control	Tropical Africa, USA	(Hanelt, 2001)
<i>Bothriochloa insculpta</i> (Hochst.) A. Camus	Erosion control	Africa	(Hanelt, 2001)
<i>Bothriochloa pertusa</i> (L.) A. Camus	Forage/Fodder, Erosion control	Throughout tropics, India, Australian	(Hanelt, 2001)
<i>Bothriochloa saccharoides</i> (Sw.) Rydb.	Forage/Fodder	USA	(Hanelt, 2001)
<i>Bouteloua curtipendula</i> (Michx) Torr.	Ornamental, Forage/Fodder	Saudi Arabia, USA, Argentina, India	(Miller and Cope, 1996; 'The Plant Database-*USDA-NRCS*', 2019)
<i>Bouteloua gracilis</i> (Kunth) Lag. ex Griffiths	Ornamental	Saudi Arabia	(Miller and Cope, 1996; Hanelt, 2001; 'The Plant Database-*USDA-NRCS*', 2019)
<i>Cenchrus americanus</i> (L.) Morrone	Cereal	Warm and tropical regions	(Sanjana Reddy, 2017a)
<i>Cenchrus</i> sp.	Forage/Fodder, famine food	See footnote 2	(Hanelt, 2001; Belgacem and Louhaichi, 2014; Kumawat et al., 2015)
<i>Chloris gayana</i> Kunth	Forage/Fodder, erosion control	Tropics and Subtropics	(Hanelt, 2001)
<i>Chloris virgata</i> Sw.	Forage/Fodder, erosion control	India, Africa	(Hanelt, 2001)
<i>Chrysopogon aucheri</i> (Boiss.) Stapf	Forage/Fodder, Remediation of landscapes	India, USA	(Hanelt, 2001)
<i>Chrysopogon fulvus</i> (Spr.) Chiov.	Forage/Fodder, Remediation of landscapes	India, USA	(Hanelt, 2001)
<i>Chrysopogon gryllus</i> (L.) Trin.	Essential oil	Italy	(Hanelt, 2001)
<i>Chrysopogon zizanioides</i> (L.) Roberty 3	Essential oil, food additive, medicine, fibre, construction material	Tropics	(Pareek and Kumar, 2013)
<i>Coix lacryma-jobi</i> L. 4	Cereal, ornamental beads	Wet areas of Asia	(Jain and Banerjee, 1974; Seetharam and Riley, 1986)
<i>Cymbopogon</i> sp. 5	Essential oil (C. nardus (L.) Rendle, C. iwarancusa (Jones) Schult. ex Roem. & Schult. and C. winterianus	Tropics and subtropics	(Duke, 1993; Bertea and Maffei, 2009)

Species	Utilization	Area of cultivation	Reference
	Jowitt., <i>C. martinii</i> (Roxb.) Wats., food (<i>C. citratus</i>), medicine		
<i>Cynodon dactylon</i> (L.) Pers.	Forage/Fodder	Worldwide	(Hanelt, 2001)
<i>Cynodon nemfuensis</i> Vanderyst	Forage/Fodder	Africa, Sri Lanka	(Hanelt, 2001)
<i>Cynodon transvaalensis</i> Burtt Davy	Loangrass	South Africa	(Hanelt, 2001)
<i>Dactyloctenium aegyptium</i> (L.) Willd.	Forage/Fodder, erosion control, famine food	South Africa	(Hanelt, 2001)
<i>Desmostachya bipinnata</i> (L.) Stapf	Mat making, handicrafts, medicine, ritual	Extensively collected in Asia	(Wendrich, 1989; Khyade et al., 2018)
<i>Dichanthium annulatum</i> (Forssk.) Stapf ex Prain	Forage/Fodder	Africa, Australia, USA, India	(Hanelt, 2001)
<i>Dichanthium aristatum</i> (Poir.) C.E. Hubb.	Forage/Fodder, Erosion control	Tropics	(Hanelt, 2001)
<i>Digitaria</i> sp. 6	Cereal, Forage/Fodder, Lawn	See footnote 6	(Seetharam and Riley, 1986; Hanelt, 2001; Nesbitt, 2005)
<i>Diplachne fusca</i> (L.) P.Beauv. ex Roem. & Schult.	Biomass production	Pakistan	(Hanelt, 2001)
<i>Echinochloa colonum</i> (L.) Link	Forage/Fodder, famine food	North America	(Hanelt, 2001)
<i>Echinochloa crusgalli</i> (L.) P. Beauv.	Forage/Fodder, erosion control, famine food	India, Egypt, Mediterranean	(Hanelt, 2001)
<i>Echinochloa esculenta</i> (A.Braun) H.Scholz 7	Cereal	SE Asia, Afghanistan	(Nesbitt, 2005; Breckle et al., 2013; Gomashe, 2017a)
<i>Echinochloa frumentacea</i> Link	Cereal	S Asia, Afghanistan, Pakistan and Saudi Arabia	(Nesbitt, 2005; Gomashe, 2017a)
<i>Echinochloa pyramidalis</i> (Lam.) Hitchc. & Chase	Forage/Fodder, erosion control	Tropical Africa	(Hanelt, 2001)
<i>Echinochloa stagnina</i> (Retz.) P. Beauv.	Forage/Fodder, food	Niger, Egypt, Chad	(Hanelt, 2001)
<i>Eleusine coracana</i> (L.) Gaertn. 8	Cereal	Africa, S Asia and Pakistan	(Ganapathy, 2017a)
<i>Eleusine indica</i> (L.) Gaertn.	Frage, Famine food, fibre	Africa, India, Australia, North America	(Hanelt, 2001)
<i>Enteropogon macrostachyus</i> (Hochst. ex A. Rich.) Munro ex Benth.	Land remediation	Kenya	(Hanelt, 2001)
<i>Eragrostis ciliaris</i> (All.) Vignolo Lutati ex Janchen	Land remediation	Kenya	(Hanelt, 2001)
<i>Eragrostis curvula</i> (Schrad.) Nees	Forage/Fodder, erosion control	Tropics	(Hanelt, 2001)
<i>Eragrostis lehmanniana</i> Nees	Forage/Fodder, land remediation, erosion control	India, USA, South Africa	(Hanelt, 2001)
<i>Eragrostis superba</i> Peyr.	Forage/Fodder, land remediation	Africa, USA	(Hanelt, 2001)
<i>Eragrostis tenella</i> (L.) P. Beauv. ex Roem. & Schult.	Forage/Fodder, famine food	India	(Hanelt, 2001)
<i>Eragrostis tef</i> (Zuccagni) Trotter 9	Cereal	Ethiopia and Eritrea, recently gaining popularity worldwide	(Assefa et al., 2017)
<i>Eragrostis unioloides</i> (Retz.) Nees ex Steud.	Forage/Fodder	S and SE Asia	(Hanelt, 2001)
<i>Eulaliopsis binata</i> (Retz.) C.E. Hubbard	Paper, fibre, ropes, etc.	East India	(Sahu et al., 2010)
<i>Hemarthria altissima</i> (Poir.) Stapf & Hubb.	Forage/Fodder	Africa, Australia, America	(Hanelt, 2001)
<i>Hemarthria compressa</i> (L.f.) R. Br.	Forage/Fodder	Africa, India, Australia	(Hanelt, 2001)
<i>Heteropogon contortus</i> (L.) P. Beauv. ex Roem. & Schult.	Forage/Fodder, Erosion control	India, Australia, Africa, USA	(Hanelt, 2001)
<i>Hyparrhenia hirta</i> (L.) Stapf ex Prain	Mat and basket weaving, Forage/Fodder, erosion control	Tropics, Southern USA	(Hanelt, 2001)
<i>Imperata cylindrica</i> (L.) Raeuschel.	Ornamental, mat weaving, roof construction, fodder	S and SE Asia, N Africa	(Hanelt, 2001; Khyade et al., 2018)
<i>Ischaemum rugosum</i> Salisb.	Forage/Fodder	SE Asia	(Hanelt, 2001)
<i>Iseilema prostratum</i> (L.) Anderss.	Forage/Fodder	S Asia	(Hanelt, 2001)
<i>Lasiurus scindicus</i> Henrard	Dune fixation, cereal	India, Iraq	(Hanelt, 2001)
<i>Leptothrix senegalense</i> (Kunth) W.D. Clayton	Land remediation	Kenya	(Hanelt, 2001)

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<i>Miscanthus nepalensis</i> (Trin.) Hack.	Ornamental in temperate regions	Temperate regions	(‘ <i>Miscanthus nepalensis</i> New Zealand Plant Conservation Network’; Chung and Kim, 2012)
<i>Miscanthus sinensis</i> Andersson	Ornamental, high yielding bioenergy crop	Worldwide	(Chung and Kim, 2012)
<i>Panicum antidotale</i> Retz.	Forage/Fodder, Erosion control	(Hanelt, 2001)	
<i>Panicum coloratum</i> L.	Forage/Fodder, Erosion control	Africa, Australia, USA	(Hanelt, 2001)
<i>Panicum flexuosum</i> Retz.	Cereal	Central India	(Ganapathy, 2017b)
<i>Panicum miliaceum</i> L.	Cereal	Worldwide	(Gomashe, 2017b)
<i>Panicum repens</i> L.	Forage/Fodder, Erosion control	Africa, India	(Hanelt, 2001)
<i>Panicum turgidum</i> Forssk.	Dune fixation, cereal	Arabia, Africa	(Hanelt, 2001)
<i>Paspalum dilatatum</i> Poir.	Forage/Fodder	Humid subtropics	(Hanelt, 2001)
<i>Paspalum distichum</i> L.	Forage/Fodder, Erosion control	USA, Argentina	(Hanelt, 2001)
<i>Paspalum scrobiculatum</i> L.	Cereal	India, Africa	(Hariprasanna, 2017a)
<i>Paspalum vaginatum</i> Sw.	Lawn grass	Worldwide	(Riefner Jr and Columbus, 2008; ‘The Plant Database-*USDA-NRCS*', 2019)
<i>Rottboellia cochinchinensis</i> (Lour.) W.D. Clayton	Forage/Fodder	Humid tropics	(Hanelt, 2001)
<i>Saccharum officinarum</i> L. 10	Sugar, syrup, medicine, bioethanol (together with <i>S. barbieri</i> Jeswiet and <i>S. sinense</i> Roxb.)	Tropics and subtropics	(Berding et al., 2004; James, 2014)
<i>Saccharum spontaneum</i> L.	Erosion control, Forage/Fodder, leaf vegetable	India, Phillipines, tropical America and Africa	(Hanelt, 2001)
<i>Schizachyrium scoparium</i> (Michx.) Nash	Ornamental	Worldwide	(‘The Plant Database-*USDA-NRCS*', 2019)
<i>Sehima nervosum</i> (Rottl.) Stapf	Forage/Fodder	India	(Hanelt, 2001)
<i>Setaria italica</i> (L.) P. Beauv.	Cereal	Worldwide	(Hariprasanna, 2017b)
<i>Setaria palmifolia</i> (J.Koenig) Stapf	Ornamental, cereal	Subtropics and tropics	(De Wet et al., 1979)
<i>Setaria sphacelata</i> (Schumach.) Stapf & Hubb. ex Prain	Forage/Fodder, Famine food	Tropics	(Hanelt, 2001)
<i>Setaria verticillata</i> (L.) P. Beauv.	Grain, Brewing	Africa	(Hanelt, 2001)
<i>Setaria viridis</i> (L.) P. Beauv.	Forage/Fodder	Europe, Central Asia, Indonesia	(Hanelt, 2001)
<i>Snowdenia polystachya</i> (Fresen.) Pilger	Forage/Fodder	Kenya	(Hanelt, 2001)
<i>Sorghum arundinaceum</i> (Desv.) Stapf ex Prain	Forage/Fodder, emergency food	Africa, Brazil	(Hanelt, 2001)
<i>Sorghum bicolor</i> (L.) Moench	Cereal, syrup, bioethanol and brooms	Worldwide	(Sanjana Reddy, 2017b)
<i>Sorghum halepense</i> (L.) Pers.	Forage/Fodder	Tropics and Subtropics	(Hanelt, 2001)
<i>Sorghum purpureo-sericeum</i> (Hochst.) Asch. & Schweinf. ex Schweinf.	Forage/Fodder	India	(Hanelt, 2001)
<i>Sorghum virgatum</i> (Hackel) Stapf ex Prain	Forage/Fodder	Africa, USA	(Hanelt, 2001)
<i>Sorghum x alnum</i> Parodi	Forage/Fodder	Turkmenistan	(Nikitin and Geldikhanov, 1988; Avutkhonov et al., 2016)
<i>Sorghum × drummondii</i> (Nees ex. Steud.) Millsp. & Chase	Cereal, Forage/Fodder	Warm and tropical regions	(‘The Plant Database-*USDA-NRCS*', 2019)
<i>Spodiopogon cotulifer</i> (Thunb.) Hack. ex A. DC. & C. DC.	Erosion control	Japan	(Hanelt, 2001)
<i>Sporobolus airoides</i> (Torr.) Torr.	Forage/Fodder	Saudi Arabia	(Miller and Cope, 1996)
<i>Stenotaphrum secundatum</i> (Walter) Kuntze	Lawn grass	Saudi Arabia, UAE	(Genovesi et al., 2009)
<i>Stipagrostis karelinii</i> (Trin. & Rupr.) Tzvelev	Dune stabilization	Central Asia	(Hanelt, 2001)
<i>Stipagrostis pennata</i> (Trin.) de Winter	Dune stabilization	Russia	(Hanelt, 2001)
<i>Stipagrostis pungens</i> (Desf.) De Winter	Dune fixation, grain, fodder/forage	Collected for its grain in subsaharan Africa, recently in cultivation	(Hanelt, 2001; Gamoun and Louhaichi, 2018)
<i>Thelepogon elegans</i> Roth ex Roem. & Schult.	Forage/Fodder	India	(Hanelt, 2001)

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<i>Themeda quadrivalvis</i> (L.) Kuntze	Forage/Fodder	India, Australia	(Hanelt, 2001)
<i>Themeda triandra</i> Forssk.	Forage/Fodder, famine food, erosion control	India, Australia, South Africa	(Hanelt, 2001)
<i>Tripidium bengalense</i> (Retz.) H.Scholz	Erosion control, fibre, basket and mat weaving	India	(Hanelt, 2001)
<i>Tripidium ravennae</i> (L.) H.Scholz	Ornamental, erosion control	Worldwide	(James, 2014; Vincent and Gardner, 2016)
<i>Urochloa brizantha</i> (A.Rich.) R.D.Webster	Forage/Fodder, Erosion control	Humid tropics	(Hanelt, 2001)
<i>Urochloa deflexa</i> (Schumach.) H.Scholz	Cereal	Africa	(Seetharam and Riley, 1986)
<i>Urochloa distachya</i> (L.) T.Q.Nguyen	Forage/Fodder, Erosion control	Australia, SE Asia	(Hanelt, 2001)
<i>Urochloa mutica</i> (Forssk.) T.Q.Nguyen	Forage/Fodder, Erosion control	Tropics and Subtropics	(Hanelt, 2001)
<i>Urochloa panicoides</i> P. Beauv.	Cereal, Forage/Fodder	India, Australia	(Hanelt, 2001)
<i>Urochloa ramosa</i> (L.) T.Q.Nguyen Nair 11	Cereal, Forage/Fodder	S India, USA	(Seetharam and Riley, 1986)
<i>Urochloa trichopus</i> (Hochst.) Stapf ex Prain	Cereal, Forage/Fodder	India	(Hanelt, 2001)
<i>Zea mays</i> L.	Cereal	Worldwide	(Staller, 2010)
Dicots Acanthaceae			
<i>Blepharis</i> sp. 12	Seed as food additive and medicinal	Collected from the wild and traded in SW Asia	(Kripa and Vijayalakshmi, 2016)
Aizoaceae			
<i>Sesuvium sesuvioides</i> (Fenzl) Verdc. 13	Leaf vegetable, ornamental	Collected from the wild in littoral regions	(Cheikhlyoussef et al., 2011)
<i>Trianthema portulacastrum</i> L.	Fodder, Medicinal, Leaf vegetable	SE Asia, Gabon	(Hanelt, 2001)
Amaranthaceae			
<i>Aerva javanica</i> (Burm.f.) Juss. ex Schult.	Fodder/Forage	Australia	(Hanelt, 2001)
<i>Amaranthus blitum</i> L.	Leaf vegetable, ornamental	India and Africa	(Costea et al., 2003; Das, 2016; 'PROTA4U web database', 2018)
<i>Amaranthus caudatus</i> L.	Pseudocereal, ornamental	Worldwide	(Sauer, 1967; Das, 2016)
<i>Amaranthus cruentus</i> L.	Pseudocereal, ornamental, leaf vegetable	Worldwide	(Sauer, 1967; Costea et al., 2003; Das, 2016)
<i>Amaranthus dubius</i> Mart. ex Thell.	Leaf vegetable	India, Africa	(Costea et al., 2003; Das, 2016; 'PROTA4U web database', 2018)
<i>Amaranthus graecizans</i> L.	Leaf vegetable	India	(Costea et al., 2003; Das, 2016; 'PROTA4U web database', 2018)
<i>Amaranthus hypochondriacus</i> L.	Pseudocereal, ornamental	Worldwide	(Sauer, 1967; Das, 2016)
<i>Amaranthus retroflexus</i> L.	Fodder/Forage	North Korea	(Hanelt, 2001)
<i>Amaranthus tricolor</i> L.	Leaf vegetable, ornamental	E and S Asia, Africa	(Costea et al., 2003; Das, 2016; 'PROTA4U web database', 2018)
<i>Amaranthus viridis</i> L.	Leaf vegetable	(Hanelt, 2001)	
<i>Gomphrena globosa</i> L.	Ornamental	Worldwide	(Hanelt, 2001)
<i>Gomphrena haageana</i> Klotzsch	Ornamental	Worldwide	('Missouri Botanical Garden - Plant Finder')
Asteraceae			
<i>Flaveria bidentis</i> (L.) Kuntze	Medicinal	Brazil	(Hanelt, 2001)
<i>Flaveria trinervia</i> (Spreng.) C. Mohr	Medicinal	South America	(Hanelt, 2001)
Chenopodiaceae			
<i>Anabasis aphylla</i> L.	Alkaloid extraction, medicine	(Hanelt, 2001)	
<i>Atriplex canescens</i> (Pursh) Nutt.	Fodder/Forage, erosion control	Iran, Israel/palestine	(Hanelt, 2001)
<i>Atriplex halimus</i> L.	Leaf vegetables, seeds, Land remediation, Erosion control	SW Asia, N Africa, Mediterranean, India	(Danin; Hanelt, 2001)
<i>Atriplex leucoclada</i> Boiss.	Fodder/Forage, Land remediation, erosion control	Investigated for cultivation	(Louhaichi et al., 2017)
<i>Atriplex repens</i> Roth	Fodder/Forage	Central Asia, SE Europe	(Hanelt, 2001)
<i>Atriplex rosea</i> L.	Fodder/Forage	North America	(Hanelt, 2001)

Species	Utilization	Area of cultivation	Reference
<i>Atriplex tatarica</i> L.	Fodder/Forage	Central Asia	(Hanelt, 2001)
<i>Bassia indica</i> (Wight) A.J. Scott	Forage/Fodder	Egypt	(Hanelt, 2001)
<i>Bassia prostrata</i> (L.) A.J. Scott	Forage/Fodder, Soil-fixation	Central Asia, Europe, USA	(Hanelt, 2001)
<i>Bassia scoparia</i> (L.) A.J. Scott	Ornamental, leaf vegetable, edible seeds (caviar substitute)	Worldwide (ornamental), Japan (caviar)	('Useful Temperate Plants Database'; Han et al., 2006; Nedelcheva et al., 2007)
<i>Caroxylon orientale</i> (S.G.Gmel.) Tzvelev	Fodder/Forage	Uzbekistan, Kyrgyzstan	(Hanelt, 2001)
<i>Caroxylon vermiculatum</i> (L.) Akhani & Roalson	Fodder/Forage	Central Asia	(Hanelt, 2001)
<i>Climacoptera turcomanica</i> (Litv.) Botsch.	Erosion control	Central Asia	(Hanelt, 2001)
<i>Halothamnus subaphyllus</i> (C. A. Mey.) Botsch.	Fodder/Forage	Central Asia	(Hanelt, 2001)
<i>Haloxylon ammodendron</i> (C. A. Mey.) Bunge ex Fenzl	Sand and saline soil fixation, Fodder/Forage, Biomass	From China to Iran and SE Europe	(Hanelt, 2001)
<i>Haloxylon persicum</i> Bunge ex Boiss. & Buhse	Dune fixation, Fodder/Forage, Biomass	From China to North Africa	(Hanelt, 2001)
<i>Hammada salicornica</i> (Moq.) Iljin	Dune fixation, Fodder/Forage, Biomass	Experimental culture in Asian deserts	(Hanelt, 2001; Singh et al., 2015)
<i>Horaninovia ulicina</i> Fisch. & C. A. Mey.	Dune fixation, Fodder/Forage, Biomass	Central Asia	(Hanelt, 2001)
<i>Salsola paulsenii</i> Litv. (Syn. <i>Kali paulsenii</i> (Litv.) Akhani & Roalson)	Saline soil remediation, Fodder/Forage	Central Asia	(Hanelt, 2001)
<i>Salsola praecox</i> (Litv.) Litv. (Syn. <i>Kali praecox</i> (Litv.) Sukhorukov)	Dune fixation	Central Asia	(Hanelt, 2001)
<i>Salsola tragus</i> L. (Syn. <i>Kali tragus</i> (L.) Scop.)	Saline soil remediation, Fodder/Forage	India, Central Asia	(Hanelt, 2001)
<i>Soda inermis</i> Fourr. (Syn. <i>Salsola soda</i> L.)	Leaf vegetable	Mediterranean	(Centofanti and Bañuelos, 2015)
<i>Soda stocksii</i> (Boiss.) Akhani (Syn. <i>Salsola stocksii</i> Boiss.)	Dune fixation, Fodder/Forage, Biomass	India, Pakistan	(Hanelt, 2001; Rathore et al., 2012)
<i>Suaeda aegyptiaca</i> (Hasselq.) Zohary 14	Leaf vegetable	Collected and cultivated in S Iran	(Akhani, 2006)
<i>Suaeda fruticosa</i> Forssk.	Saline soil remediation, biomass	India	(Hanelt, 2001)
<i>Suaeda monoica</i> Forsk.	Saline soil remediation, biomass	India	(Hanelt, 2001)
<i>Xylosalsola paletzkiana</i> (Litv.) Akhani & Roalson	Dune fixation, Fodder/Forage, Biomass	Central Asia, Turkmenistan	(Hanelt, 2001)
<i>Xylosalsola richteri</i> (Moq.) Kar. ex Litw.	Dune fixation, Fodder/Forage, Biomass, Medicine	Central Asia, SE Europe, Turkmenistan	(Hanelt, 2001)
Cleomaceae			
<i>Cleome gynandra</i> L.	Leaf vegetable, seed oil, ornamental	Africa, SE Asia, Caribbean	(Hanelt, 2001; Cheikhyssef et al., 2011; 'PROTA4U web database', 2018)
Nyctaginaceae			
<i>Boerhavia</i> sp. 15	Leaf vegetable, seeds as bread additive, medicine	Traditionally collected in the wild in India and South Arabia	(Mahesh et al., 2012; Ammar et al., 2016)
Polygonaceae			
<i>Calligonum</i> sp.	Dune stabilization, biomass, food, fodder/forage	C, S, SW Asia, N Africa, SE Europe	(Hanelt, 2001)
Portulacaceae			
<i>Portulaca oleracea</i> L.	Leaf vegetable, seed and oil	Widespread weed, regionally cultivated in Asia, N Africa and Europe	(Gonnella et al., 2010; Uddin et al., 2014)
<i>Portulaca grandiflora</i> W.J. Hook	Ornamental	Worldwide	(Jia et al., 2017)
<i>Portulaca pilosa</i> L.	Ornamental	America, SE Asia	(Hanelt, 2001)
<i>Portulaca quadrifida</i> L.	Leaf vegetable, Medicinal	Africa, SE Asia, India	(Hanelt, 2001)
Zygophyllaceae			
<i>Tribulus terrestris</i> L. 16	Whole plant used as food and medical supplement	Cultivated in S and E Europe, India	(Hanelt, 2001; Boteva et al., 2014; Salamon et al., 2016)

Notes:1. Other stoloniferous *Cyperus* sp., like *C. amauropus* Steud. *C. bulbosus* Vahl, *C. compressus* L., *C. cyperoides* (L.) Kuntze, *Cyperus longus* L. and *C. rotundus* L. also bear edible tubers, although not cultivated but collected from the wild. 2. *C. biflorus* Roxb., *C. ciliaris* L., *C. pennisetiformis* Hochst. ex Steud., *C. prieurii* (Kurth) Maire, *C. clandestinus* (Hochst. ex Chiov.) Morrone, *C. divisus* (J.F.Gmel.) Verloove, *C. flaccidus* (Griseb.)

Morrone, *C. macrourus* (Trin.) Morrone, *C. orientalis* (Rich.) Morrone, *C. polystachios* (L.) Morrone, *C. purpureus* (Schumach.) Morrone, *C. setaceus* (Forssk.) Morrone, *C. sieberianus* (Schltdl.) Verloove, *C. stramineus* (Peter) Morrone and *C. setiger* Vahl are cultivated as forage/fodder throughout the tropics and warm regions of the world. 3. Six *Chrysopogon* species distributed in SW Asia. 4. A second species *C. aquatica* Roxb. Grows wild in Afghanistan. 5. *C. martinii* (Roxb.) Wats. *C. iwarancusa* (Jones) Schult. ex Roem. & Schult. and 6 other *Cymopogon* sp. are distributed within SW Asia and are used locally. 6. A number of 21 *Digitaria* species are distributed in SW Asia: *D. exilis* (Kippst.) Stapf and *D. iburua* Stapf (Africa), *D. sanguinalis* (L.) Scop. (Europe and N America) and *D. compacta* (Roth ex Roem. & Schult.) Veldkamp and *D. cruciata* (Ness) A. Camus (E India) grown as cereals: *D. abyssinica* (Hochst.) Stapf (S.Africa), *D. ciliaris* (Retz.) Koeler (USA), *D. sanguinalis* (L.) Scop. (N. America), *D. ternata* (A.Rich.) Stapf ex Thiselton-Dyer (Nigeria) are grown as Forage/Fodder: *D. longiflora* (Retz.) Pers. (Sri Lanka) is grown as lawn. 7. Its wild relative *E. crus-galliis* (L.) P. Beauv. Sometimes, collected and has been cultivated in the past for its grain.8. Four more *Eleusine* species grow in SW Asia. 9. 36 species of *Eragrostis*, including direct relatives of *E. tef* L. (e.g. eglandulate forms of *E. pilosa* (L.) P. Beauv.) are widespread throughout SW Asia. 10. Six further species of *Saccharum* are distributed throughout SW Asia and used locally for medicinal purposes. 11. 15-18 wild *Urochloa* sp. (including the two cultivated species) are distributed in SW Asia. 12. Recent domestication and cultivation efforts. 13. Recent domestication and cultivation efforts. 14. Further 21 *Suaeda* sp. distributed in SW Asia and some collected as leaf vegetables. 15. Recent efforts of domestication. 16. Other two species also distributed in SW Asia.

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