

Appendix



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Wild species recorded in the Egyptian gardens. Life forms are **Hm**: Hemicryptophyte, **Hy**: Hydrophyte, **Th**: Therophyte, **Ph**: Phanerophyte, **Ch**: Chamaephyte, **Ge**: Geophyte and **He**: Helophyte. Natural habitats are **RO**: rocky habitats (rocky crevices, rocky hillsides, volcanic soil and stony soil), **AQ**: aquatic habitats (e.g. Nile, Nile canals, Nile banks, lakes, canals, pools, ditches, and rice fields), **SA**: sandy habitats (e.g. coastal sand dunes, sand plains and sandy soil), **CU**: cultivated habitats (e.g. weeds of cultivation, fields, escapes from cultivation or on roadsides among cultivated areas), **WA**: wastelands, **WE**: wetlands and **SL**: salt-marshes. National phytogeographical regions (according to Boulos 2009) are **N**: Nile region, **O**: Oases of the Western Desert, **ME**: Mediterranean coastal, **DE**: Desert, **R**: Red Sea coastal strip, **GE**: Gebal Elba and **S**: Sinai Peninsula. **Economic uses** are **ME**: Medicine, **HF**: Feeding, **OT**: other uses (e.g. industry, dyes, aromatic oils, painting, resin and etc.), **TI**: timber, **Fu**: Fuel and **GZ**: grazing. **Environmental benefits** are **NF**: nitrogen fixer, **SA**: sand accumulator, **WB**: windbreaker, **RR**: Riverbank retainer, **SH**: Shading and **WP**: water purifier. Local threats are coded as **OG**: Overgrazing and browsing, **OC**: Over collecting and over cutting, **CA**: Clearance for agriculture, **HI**: Habitat loss, **DI**: Disturbance by cars and **MI**: Mining. * represents threatened species, ** represents alien species. **References** are Raunkiaer (1937), Seif El-Nasr and Bidak (2005), Boulos (2009), Shaltout et al. (2010), Shaltout and Ahmed (2012) and plant list database (<http://www.theplantlist.org>)

Species	Life forms	Phytogeographical regions	Natural habitats	Economic uses	Environmental benefits	Local threats	Family
<i>Acacia laeta</i> R. Br. ex Benth.	Ph	N, O, GE	RO	GR, OT	NF, SH	BO	Fabaceae
<i>Acacia nilotica</i> (L.) Willd. Ex Delile	Ph	N, O, DE	AQ	GR, ME, FU, TI, OT	BR, NF, SH	BO, OC, MQ	Fabaceae
<i>Acacia seyal</i> Delile	Ph	N	AQ	OT	NF, SH	MQ	Fabaceae
<i>Adiantum capillus-veneris</i> L.	Hm	N, O, ME, DE, R, GE, S	WE, AQ	ME		OC, BO	Pteridaceae
<i>Ageratum conyzoides</i> L.	Ch	N, O	WE, AQ	ME		OC, MQ	Asteraceae
<i>Ageratum houstonianum</i> Mill.	Ch	N	AQ			MQ	Asteraceae
<i>Aizoon canariensis</i> Linn.	Th	ME, DE, GE, S	SA, RO	ME		OC, CA	Aizoaceae
<i>Alcea rosea</i> L.**	Th	S	CU	GR		BO	Malvaceae
<i>Alhagi graecorum</i> Boiss.	Hm	N, O, ME, DE, R, S	WE, WA, CU	GR, ME, HF, FU, OT	RR, SA, NF	BO, OC, DT	Fabaceae
<i>Amaranthus hybridus</i> L.**	Th	N, ME, O, S	CU	ME, HF	WP	OC	Amaranthaceae
<i>Amaranthus tricolor</i> L.**	Th	N, ME	CU		WP		Amaranthaceae
<i>Anemone coronaria</i> L.	Th	ME, S	CU, SA			HL	Ranunculaceae
<i>Apium graveolens</i> var. <i>dulce</i> (Mill.) Pers.	Th	ME, DE, S	CU	HF, ME		OC	Apiaceae

Appendix Cont.1.

Species	Life forms	Phytogeographical regions	Natural habitats	Economic uses	Environmental benefits	Local threats	Family
<i>Argemone mexicana</i> L.	Th	N	AQ, WA, CU			MQ, DT	Papaveraceae
<i>Atriplex halimus</i> L.	Ph	ME, DE, S	SA, SL	GR, ME, HF, OT	SA	BO, OC, CA	Amaranthaceae
<i>Avena fatua</i> L.	Th	N, O, ME, DE, S	CU	ME		OC	Poaceae
<i>Azolla caroliniana</i> Willd.	Hy	N	AQ	GR, ME, OT	WP	BO, OC	Salviniaceae
<i>Balanites aegyptiacus</i> (L.) Delile	Ph	N, O, ME, DE, S	SA, RO	GR, ME, HF, OT	RR	BO, OC, CA	Zygophyllaceae
<i>Brassica nigra</i> L.	Th	N	CU	ME, HF		OC	Brassicaceae
<i>Brassica rapa</i> L.**	Th	N, O, ME	CU	HF, ME		OC	Brassicaceae
<i>Calotropis procera</i> (Aiton) W.T.Aiton	Ph	N, O, DE, R, GE, S	SA, CU	ME		OC, CA	Apocynaceae
<i>Caralluma acutangula</i> (Decne.) N.E.Br.	Ph	GE	RO	HF			Apocynaceae
<i>Cardiospermum halicacabum</i> L.	Ph	N, O	CU			DT	Sapindaceae
<i>Ceratonia siliqua</i> L.	Ph	S	RO	HF, ME, TI, OT			Fabaceae
<i>Cichorium divaricatum</i> Schousb.	Th	N, O, ME	CU, WE	ME, HF		BO, OC, HL	Astraceae
<i>Clitoria ternatea</i> L.**	Th	N	CU	ME, HF	NF	OC	Fabaceae
<i>Commelina benghalensis</i> L.	Th	N	CU	HF			Commelinaceae
<i>Convolvulus arvensis</i> L.	Hm	N, ME, O, R	CU, WA	GR, HF		BO	Convolvulaceae
<i>Cordia sinensis</i> Lam.	Ph	O, GE	WE	ME		HL	Boraginaceae
<i>Cortaderia selloana</i> Schult. & Schult.f.	Th	ME, S	CU				Poaceae
<i>Cynodon dactylon</i> (L.) Pers.	Ge, He	N, ME	SA, RO, AQ, CU	GR, ME, HF	RR	BO, OC, CA	Poaceae
<i>Cyperus alternifolius</i> L.	Th	N	CU	GR, ME		BO, OC	Cyperaceae
<i>Cyperus papyrus</i> L.*	Ge, He	N	CU, AQ	ME, OT		OC	Cyperaceae
<i>Datura innoxia</i> Mill. **	Th	N	WA	ME		OC	Solanaceae
<i>Datura stramonium</i> L. **	Th	N	WA	ME		BO, CA, HL, MQ, OC	Solanaceae
<i>Dianthus chinensis</i> L.	Th	S	RO	ME		OC	Caryophyllaceae
<i>Dichrostachys cinerea</i> (L.) Wight and Arn.*	Th	N	AQ			BO, OC, MQ	Fabaceae

Appendix Cont.2.

Species	Life forms	Phytogeographical regions	Natural habitats	Economic uses	Environmental benefits	Local threats	Family
<i>Dracaena ombet</i> Kotschy and Peyr. *	Ph	GE	RO	HF		HL, OC, CA	Asparagaceae
<i>Echinochloa crus-galli</i> (L.) Beauv	Th	N, O, ME, DE	AQ	GR		BO	Poaceae
<i>Echinochloa stagnina</i> (Retz.) P.Beauv	Th	N, O, ME, DE	AQ, WE	GR		BO, MQ	Poaceae
<i>Eichhornia crassipes</i> (Mart.) Solms	Hy	N, O, ME	AQ	GR, OT	WP		Pontederiaceae
<i>Elodea canadensis</i> Michx.	Hy	N	AQ	HF			Hydrocharitaceae
<i>Ephedra alata</i> Decne	Ph	O, ME, DE, S	SA	ME	WB, SA	OC, CA	Ephedraceae
<i>Ephedra aphylla</i> Forssk.	Ph	ME, DE, S	SL	ME		OC	Ephedraceae
<i>Euphorbia heterophylla</i> L. **	Th	N, O, ME	CF	ME		OC	Euphorbiaceae
<i>Euphorbia mauritanica</i> L.**	Hm	N, ME	SA, RO	ME		OC, CA	Euphorbiaceae
<i>Faidherbia albida</i> (Delile) A. Chev.	Ph	N, DE	AQ,SA,WE	GR,ME,HF,TI, OT	NF	BO, OC, MQ	Fabaceae
<i>Ficus sycomorus</i> L.	Ph	N, O, ME, S	AQ,WE, CU	HF, OT		HL, OC, CA	Moraceae
<i>Ficus carica</i> L. ***	Ph	N, DE	CU	HF, OT		HL, OC, CA	Moraceae
<i>Ficus palmata</i> Forssk.	Ph	DE, GE, S	RO				Moraceae
<i>Hibiscus sabdariffa</i> L.**	Th	N, O	CU	HF, ME		OC	Malvaceae
<i>Hyphaene thebacia</i> (L.) Mart.	Ph	N	SA	HF, ME		OC	Arecaceae
<i>Ipomoea carnea</i> Jacq. **	Ch	N	AQ,WE,WA	GR, HF		BO, MQ	Convolvulaceae
<i>Ipomoea pes-caprae</i> (L.) R. Br.**	Hm	DE, S	SA, SL	GR, HF		BO, MQ	Convolvulaceae
<i>Ipomoea purpurea</i> (L.) Roth.	Hm	N	CU	ME		OC	Convolvulaceae
<i>Lantana camara</i> L. **	Ph	N	WE, WA	ME		OC	Verbenaceae
<i>Lemna gibba</i> L.	Hy	N, O, ME	AQ	GR, OT		BO	Araceae
<i>Lolium perenne</i> L.	Th	N, O, ME	CU	ME, HF		OC	Poaceae
<i>Lotus glaber</i> Mill.	Th	N, O, ME	WE,CU, AQ	HF,ME,TI,OT	NF	OC	Fabaceae
<i>Malva parviflora</i> L.	Th	N, O, ME, DE, R, GE, S	CU,WA, SA	GR, ME, HF		BO, OC, DT	Malvaceae

Appendix Cont 3.

Species	Life forms	Phytogeographical regions	Natural habitats	Economic uses	Environmental benefits	Local Threats	Family
<i>Malva sylvestris</i> L.	Th	N, ME, S	CU	HF		DT	Malvaceae
<i>Medemia argun</i> (Mart.) Wurttenb. ex H.Wendl. *	Ph	O, DE	SA	OT		OC	Arecaceae
<i>Medicago lupulina</i> L.	Th	ME, O, S	WE, CU	OT		DT	Fabaceae
<i>Medicago sativa</i> L. sub. sp. <i>sativa</i> **	Th	N, O, ME, S	CU, WA	HF, ME		OC, MQ, DT	Fabaceae
<i>Melilotus albus</i> Medik	Hm	N, S	CU	GR, ME	NF, WP	BO, OC	Fabaceae
<i>Mentha longifolia</i> (L.) Huds.	Th	N, O, S	AQ	ME, HF		OC	Lamiaceae
<i>Mimosa pigra</i> Justenius	Th	N, DE	AQ, WE	OT		MQ	Fabaceae
<i>Moringa peregrina</i> (Forssk.) Fiori	Ph	S, DE	RO	ME, HF, OT		OC	Moringaceae
<i>Narcissus tazetta</i> L.	Th	ME, S	SA	OT	SA	CA	Amaryllidaceae
<i>Nicotiana glauca</i> Graham **	Ph	N, O, ME, DE, S	WA	ME		OC	Solanaceae
<i>Nigella sativa</i> L. **	Th	N, ME	CU	ME, HF, OT		OC	Ranunculaceae
<i>Nymphaea lotus</i> L.*	Hy	N, ME	AQ	ME		OC	Nymphaeaceae
<i>Olea europea</i> L.sub sp. <i>europea</i>	Ph	N, O, ME, DE, S	CU	HF, ME, OT		OC, DT	Oleaceae
<i>Oxalis pes-caprae</i> L. **	Ph	N, ME, S	WE, CU	ME, HF		OC	Oxalidaceae
<i>Papaver rhoeas</i> L.	Th	N, ME, DE, S	CU	ME		OC, DT	Papaveraceae
<i>Pennisetum setaceum</i> (Forssk.) Chiov.	Ge, He	N, ME, DE, GE, S	SA, RO, CU	GR, OT		BO, CA	Poaceae
<i>Phoenix dactylifera</i> L.	Ph	N, ME, O, DE, R, GE, S	SA,AQ, CU	GR, ME, HF, FU, TI, OT	WB	BO, OC	Arecaceae
<i>Phragmites australis</i> (Cav.) Trin. Ex Steud.	Ge, He	N, O, ME, DE, R, S	AQ, SA, WE	GR, OT	WP	BO, CA	Poaceae
<i>Phyla nodiflora</i> (L.) Greene	Hm	N, O, ME, DE, S	WE, AQ	HF, OT		BO	Verbenaceae
<i>Phyllanthus reticulatus</i> Poir.	Ph	N	CU	ME, OT		OC, DT	Phyllanthaceae
<i>Pistacia lentiscus</i> L.	Ph	ME	SA, RO	OT		CA	Anacardiaceae
<i>Pistia stratiotes</i> L.	Hy	N	AQ	HF			Araceae
<i>Portulaca oleracea</i> L.	Th	N, GE	CU, WE	GR, ME, HF		BO, OC, CA	Portulacaceae
<i>Prosopis farcta</i> (Banks & Sol.) J.F.Macbr.	Ph	N, O, ME, DE, S	SA, CU, AQ	ME, OT	NF	OC, CA	Fabaceae

Appendix Cont. 4.

Species	Life forms	Phytogeographical regions	Natural habitats	Economic uses	Environmental benefits	Local threats	Family
<i>Pteris vittata</i> L.*	Hm	N	RO	OT	NF	HL	Pteridaceae
<i>Ricinus communis</i> L. **	Ph	N, ME, O, DE, R, GE, S	SA, CU	ME, OT	WB, SA	OC	Euphorbiaceae
<i>Salix mucronata</i> Thunb.	Ph	N, O, ME, DE, S	AQ, CU	ME	RR, WB	OC	Salicaceae
<i>Salix tetrasperma</i> Roxb.**	Ph	N, ME, DE	AQ, CU	ME, TI, OT	RR, WB	OC	Salicaceae
<i>Salvadora persica</i> L.	Ph	N, O, R, GE, S	SA, RO	ME, OT		OC, CA	Salvadoraceae
<i>Senna occidentalis</i> (L.) Link.	Ph	N, O	CU	OT	NF	MQ, DT	Fabaceae
<i>Sesbania sesban</i> (L.) Merrill	Ph	N, ME, O, S	AQ, CU	GR, ME, HF, TI, OT	SH	BO, OC, MQ	Fabaceae
<i>Solenostemma arghel</i> (Delile) Hayne	Ph	DE, S, GE	RO, SA	ME		OC, CA	Apocynaceae
<i>Tamarix aphylla</i> (L.) Karst.	Ph	N, O, ME, DE, R, GE, S	SL, SA	OT	WB	CA	Tamaricaceae
<i>Tamarix nilotica</i> (Ehrenb.) Bunge	Ph	N, O, ME, DE, R, GE, S	SA, SL	ME, FU, TI, OT	WB, SA	OC, CA	Tamaricaceae
<i>Withania somnifera</i> (L.) Dunal	Ch	N, O, ME, GE	WA	ME		OC	Solanaceae
<i>Ziziphus spina-christi</i> (L.) Desf. Willd. **	Ph	N, O, ME, DE, R, GE, S	SA, RO	HF, TI, FU, TI, OT	WB, SA, SH	CA	Rhamnaceae