

Supplementary Table 1 : list of pollen taxa recovered at Lake Yoa

taxon name (APD)	Habit (APD)	Phytogeographical affinity
Acacia	A	Sahara-Sahel
Aeschynomene afraspera-type	A	Sudan-Sahel
Alchornea	A	Sudan
Balanites	A	Sahara-Sahel
Betula	A	Temperate
Boscia-type angustifolia	A	Sudan-Sahel
Boscia-type salicifolia	A	Sudan
Brachystegia	A	Sudan
Cadaba-type	A	Sahara-Sahel
Calligonum polygonoides	A	Sahara-Mediterranean
Carissa edulis-type	A	Sahel
Celtis	A	Sudan
Commiphora	A	Sudan-Sahel
Cordia africana-type	A	Sudan-Sahel
Corylus	A	Temperate
Crateva adansonii	A	Sudan-Sahel
Dialium	A	Sudan
Dichrostachys cinerea-type	A	Sudan
Dodonaea viscosa-type	A	Sudan
Ephedra distachya-type	A	Sahara-Mediterranean
Erica-type arborea	A	Tropical mountains
Faidherbia albida	A	Sahara-Sahel
Ficus	A	Sudan-Sahel
Flueggea virosa-type	A	Sudan-Sahel
Fraxinus	A	Temperate
Guiera-type senegalensis	A	Sudan-Sahel
Juniperus-type	A	Tropical mountains
Lannea-type	A	Sudan
Maerua-type	A	Sahara-Sahel
Maytenus	A	Sudan
Meliaceae undiff.	A	Sudan
Mimosa pigra-type	A	Sudan-Sahel
Moltkiopsis ciliata	A	Sahara-Mediterranean
Morelia senegalensis	A	Sudan
Myrica	A	Tropical mountains
Olea	A	Mediterranean
Picea	A	Temperate
Piliostigma reticulatum-type	A	Sudan
Pinus	A	Mediterranean-Temperate
Pistacia	A	Mediterranean
Podocarpus	A	Tropical mountains
Quercus	A	Temperate
Quercus ilex-type	A	Mediterranean
Rhus-type	A	Sudan-Sahel
Salix	A	Tropical undiff.

Salvadora persica-type	A	Sahara-Sahel
Syzygium-type	A	Sudan
Tamarindus-type indica	A	Sudan-Sahel
Tamarix	A	Sahara-Mediterranean
Ziziphus-type	A	Sahara-Sahel
Capparis	AL	Sahel
Capparis fascicularis-type	AL	Sahel
Capparis tomentosa-type	AL	Sahel
Clematis-type	AL	Sudan
Combretum-type	AL	Sudan-Sahel
Ephedra fragilis-type	AL	Sahara-Mediterranean
Grewia-type	AL	Sudan-Sahel
Jasminum	AL	Sudan
Mimosaceae undiff.	AL	Tropical undiff.
Oleaceae undiff.	AL	Mediterranean
Pavetta	AL	Sudan
Tapinanthus-type	Ap	Sahel
Sesbania sesban	Aq	aquatics
Hyphaene-type	PA	Sahara-Sahel
Phoenix dactylifera-type	PA	Sahara-Mediterranean
Abutilon	I	Sahara-Sahel
Aizoaceae undiff.	I	Sahara
Apiaceae undiff.	I	Tropical undiff.
Artemisia	I	Sahara-Mediterranean
Asteraceae undiff.	I	Sahara
Brassicaceae undiff.	I	Sahel-Sahara-Mediterranean
Capparidaceae undiff.	I	Sahara-Sahel
Caryophyllaceae undiff.	I	Tropical undiff.
Cassia-type	I	Sahara-Sahel-Sudanan
Cichorieae undiff.	I	Sahara
Cissus	I	Sudan-Sahel
Euphorbiaceae undiff.	I	Tropical undiff.
Euphorbia-type	I	Tropical undiff.
Fabaceae undiff.	I	Tropical undiff.
Gentianaceae undiff.	I	Sahara-Mediterranean
Geraniaceae undiff.	I	Sahel-Sahara-Mediterranean
Hibiscus	I	Sahara-Sahel
Indigofera	I	Sahara-Sahel
Ipomoea-type	I	Tropical undiff.
Lamiaceae undiff.	I	Tropical undiff.
Limeum	I	Sahara
Malvaceae undiff.	I	Tropical undiff.
Monocotyledoneae undiff.	I	Tropical undiff.
Phyllanthus-type	I	Sudan-Sahel
Polygala-type	I	Sahel
Psoralea	I	Sahara-Sahel
Resedaceae undiff.	I	Sahara-Mediterranean
Rumex	I	Sahara-Mediterranean

Scrophulariaceae undiff.	I	Sahara-Mediterranean
Triumfetta/Corchorus	I	Sahara-Sahel
Urticaceae undiff.	I	Sahara-Mediterranean
Veronica	I	Sahara-Mediterranean
Vitaceae undiff.	I	Tropical undiff.
Zygophyllum	I	Sahara-Sahel
Cissampelos-type mucronata	L	Sudan-Sahel
Cocculus pendulus-type	L	Sahara-Sahel
Amaranthaceae/Chenopodiaceae undiff.	I	Sahara-Sahel
Aerva-type javanica	N	Sahara-Sahel
Amaranthus-type	N	Sahara-Sahel
Celosia argentea-type	N	Sahara-Sahel
Celosia-type trigyna	N	Sahara-Sahel
Psilotrichum-type	N	Sahara-Sahel
Alysicarpus	N	Sudan-Sahel
Ambrosia-type maritima	N	Sahel-Sahara-Mediterranean
Anchusa-type	N	Sahara-Mediterranean
Arnebia hispidissima-type	N	Sahara-Sahel
Atractylis-type	N	Sahara-Mediterranean
Blepharis-type	N	Sahara-Sahel
Boerhavia-type	N	Sahara-Sahel-Sudanan
Centaurea-type senegalensis	N	Sahel
Cerealia	N	Mediterranean
Chrozophora brocchiana-type	N	Sahara-Sahel
Cistanche	N	Sahara-Mediterranean
Cleome-type	N	Sahara-Sahel
Cleome-type gynandra	N	Sahara-Sahel
Commelina-type benghalensis	N	Sahel
Cornulaca/Aerva	N	Sahara
Cynoglossum-type	N	Sudan
Eriosema-type	N	Sudan-Sahel
Euphorbia-type hirta	N	Tropical undiff.
Fagonia	N	Sahara-Mediterranean
Helianthemum	N	Sahara-Mediterranean
Heliotropium	N	Sahara
Hewittia-type scandens	N	Sudan
Leonotis-type	N	Tropical undiff.
Leucas-type	N	Tropical undiff.
Liliaceae undiff.	N	Tropical undiff.
Lotus arabicus-type	N	Sahara-Sahel
Mitracarpus villosus	N	Sudan-Sahel
Phyllanthus-type amarus	N	Sudan-Sahel
Phyllanthus-type fraternus	N	Sudan-Sahel
Phyllanthus-type maderaspatensis	N	Sahara-Sahel
Plantago ciliata-type	N	Sahara-Mediterranean
Plantago lanceolata-type	N	Sahara-Mediterranean
Poaceae undiff.	N	Tropical undiff.
Polycarpaea-type	N	Sahara-Sahel

Solanum-type nigrum	N	Sudan-Sahel
Spermacoce-type	N	Sudan
Spermacoce-type radiata	N	Sudan-Sahel
Tribulus	N	Sahara-Sahel
Vernonia perrottetii-type	N	Sahel
Waltheria	N	Sahara-Sahel
Ricinus communis	NG	Tropical undiff.
Citrullus	NL	Sahara-Mediterranean
Convolvulus-type	NL	Sahara-Sahel
Cucumis dipsaceus-type	NL	Sahara-Sahel
Cucurbitaceae undiff.	NL	Tropical undiff.
Cyperaceae undiff.	NL	Tropical undiff.
Luffa-type	NL	Sahara-Sahel
Rhynchosia-type	NL	Sahara-Sahel
Vigna-type	NL	Tropical undiff.
Ammannia-type	Nq	aquatics
Ludwigia-type	Nq	aquatics
Polycarpon-type	Nq	aquatics
Polygonum senegalense-type	Nq	aquatics
Typha	Nq	aquatics
Ceratopteris cornuta	Sp	ferns
Lycopodium	Sp	ferns
Monoletes undiff.	Sp	ferns
Ophioglossum	Sp	ferns
Pteris-type	Sp	ferns
Triletes undiff.	Sp	ferns
Undetermined	x	