Index to New Updated Names of the Flora of Libya Volume II

Rafaa A. Essokne[1]*, Mohammed H. Mahklouf[1], Hanan F. Isweiri[1].
Department of Biology, Faculty of Education, University of Benghazi, Benghazi Libya
* *Corresponding author:* rafa.essokne@uob.edu.ly

Publishing data: 28/2/2024

Abstract: This volume continue provides an up-to-date checklist of vascular taxa exclusive to Libyan Flora. ix hundred and thirteen species of vascular plants belonging to 150 families were recorded and arranged as in Flora of Libya started from Primulaceae to Flacourtiaceae and divided into Two volumes. Volume I started from Primulaceae to Solanaceae, which contains 301 updated species, and this volume II contains the rest of 312 updated species started from Caryophyllaceae to Flacourtiaceae.

Keywords: Flora Libya, Update, New Name, Species, Taxonomy, Families.

Introduction:

The reference flora for Libya is the Flora of Libya (Ali *et al.*, 1976–1989). Because of the flora out of date, it is no longer representative. Several specific contributions have been published since and are referenced in the Index synonymique de la flore d'Afrique du Nord by Dobignard and Chatelain (2010–2013). There are currently no plans for preparing a new national flora and there is no online database. On an infranational level, there is the Catalogue raisonné des plantes de Tripolitaine (Durand & Baratte, 1910) and the Prodromo della flora Cirenaica (Pampanini, 1931), but these works are too dated to be of any real use. Several more recent works have been published on the northern part of Libya by Sicilian botanists, for example La vegetazione costiera della Cirenaica (Brullo & Furnari, 1988). The recent collections of the late Peter Davis are in Edinburgh, London and Reading (Essokne & Jury, 2015). An updated checklist covering 43 families, 138 genera and 411 species of the Libyan flora as treated in the Flora of Libya was recently published (Gawhari *et al.* 2018). Boulos (1977) claim the Libyan flora to comprise 1,825 native and naturalized species, with 137 endemics (compared to 3,675 and 625 for Morocco and 2,076 and 70 endemics for Egypt). However, over 90% of Libya's plant species occur along the Mediterranean coastal strip, including both Jabal Nefousa in Tripolitania and the Green Mountain in Cyrenaica (FAO, 1996)

By far the highest number of species is found on the Green Mountain, which also has greater numbers of endemics and affinities with the flora of the western Mediterranean, Crete, Cyprus as well as Egypt and the eastern Mediterranean. The large areas of limestone and calcareous substrate always favour species diversity, as well as the prevailing bioclimate. A number of existing publications contain data on the species richness and species endemism of the flora in the Cyrene Declaration Area.

Although a number of scientific papers list numbers of endemic species for in the Cyrene Declaration Area, there is little collated information on the exact geographic distribution of endemic plant species. The lack of this data makes it difficult to assign conservation priority to areas on the basis of irreplaceability and vulnerability. Data sources used include Pampanini (1931), Kheith, (1965), Brullo & Furnari (1979), Brullo & Furnari (1991), El-Barasi *et al*. (2003), El-Sherif *et al*. (1991), Klopper *et al*. (2007), Mahklouf, & Etayeb (2019). Flora of Libya, herbarium specimens and taxonomic databases including MedChecklist and Aluka.

In this checklist, 45% of the taxa were reclassified at the family, genus, or species level based on modern taxonomic treatments. This partial checklist will form the basis of a complete updated checklist of the Libyan flora.

MATERIAL AND METHODS

The collection of specimens of the Flora of Libya has recently been completed and published by Al Faateh University. This rapidly published Flora is a good work with valuable illustrations, but has many inaccuracies and is now out-of-date following the enormous amount of recent research on the Mediterranean flora.

This would seem extraordinary given the short study period. The Cyrene Declaration Area is not only under-explored botanically, but much of the previous botany has been undertaken by foreign researchers who have taken the specimens out of Libya. Thus, the types and specimens relating to the early works of Durand & Barratte (1910) are in Montpellier and Paris; those on which the work by Pampanini (1931) are based, made by the Italian botanists during the period 1911—1943 are located in Florence, Italy. The recent collections of the late Peter Davis are in Edinburgh, London and Reading (Essokne & Jury, 2015).

In this research, the nomenclatural data and name registration provided by the websites of the Catalogue

of life (2021), the Index synonymique de la flore d'Afrique du Nord (2010–2013), Plants of the world (Royal Botanic Gardens WCSP- 2017), Euro-Mediterranean Checklist Euro+Med. (2012), The Plant List. (2013), African Plants Database (APD, 2022) and International Plant Names Index (IPNI, 2022), to update the synonyms of the Flora of Libyan plants.

RESULTS AND DISCUSSION

Sometimes a species name will change as a result of nomenclatural research, for example, because someone has discovered that there is an older, perfectly valid name, for the same taxon. Ever since Darwin, the taxonomy of organisms is required to attempt to reflect their phylogeny, in other words, how organisms are classified is supposed to represent their tree of descent. Because of this, sometimes it is discovered that a species needs to be moved to another genus, or even to a brand new genus. Therefore, the arrangement of species and families were recorded and arranged as in Flora of Libya started from Primulaceae to Flacourtiaceae and divided into Two volumes, volume I started from Primulaceae to Solanaceae, which contains 301 updated species (Essokne, R., Mohammed H. Mahklouf, 2023). In this checklist volume II started from Caryophyllaceae to Flacourtiaceae follow that the Catalogue of Life (2021), Plants of the World Online Kew Science, The Plant List (2013), Euro+Med checklist (2012) and Index Synonymique de la Flore D'Afrique du Nord (2010–2013), with extra notes referring to any additions, changes or corrections. These notes may deal with different ranks of taxa. For example, the family Scrophulariaceae locally represented by 10 genera and 36 species, five species are transferred to the family Plantaginaceae. Another example: The genus *Cytinus* is a genus of 6 species distributed in Mediterranean region, South Africa and Madagascar, presented by one species in Libya *Cytinus hypocistis* also transferred to the family Cytinaceae. Furthermore, studies of the molecular phylogeny of Araceae and Lemnaceae in recent years have confirmed the long-suspected close relationship of the two families, despite their obvious morphological differences; Lemnaceae has 6 genera with c. 30 species. cosmopolitan in fresh waters; represented by one genus with 2 species *Lemna minor* and *Lemna gibba* in Libya (Table 2).

All species, genus and family names will appear in this checklist as they were treated in the "Flora of Libya" (1976-1989). The above examples of combining two or three families under one family name is given here or the whole family transferred to another family to attract the attention of the users of this checklist about up-to-date concepts in taxonomic research based on molecular phylogeny. Numerous nomenclatural changes have been made, and are adopted in this checklist.

Table 2. List of updated accepted names with their synonyms.

NO.	Synonym (Flora of Libya)	Accepted Name (Catalogue of Life)	Family	New Family
302.	*Erodium hirtum* (Forskal) Willd.	*Erodium crassifolium* subsp. *hirtum* (Forsk.) Guitt.	Geraniaceae	
303.	*Erodium tocranum* Guittonn. & Le Houerou.	*Erodium salzmannii* subsp. *tocranum* (Guitt. & Le Houér.) Guitt.	Geraniaceae	
304.	*Erodium oxyrhynchum* M. Bieb.	*Erodium oxyrrhynchum* M. Bieb.	Geraniaceae	
305.	*Pelargonium radula* (Cav.) L'Her.	*Pelargonium radens* H. E. Moore	Geraniaceae	
306.	*Geranium brutium* Gasp.	*Geranium molle* L.	Geraniaceae	
307.	*Putoria calabrica* (L.f.) DC.	*Plocama calabrica* (L.f.) M.Backlund & Thulin	Rubiaceae	
308.	*Valantia lanata* Delile ex Coss., nom. nud.	*Valantia columella* (Ehrenb. ex Boiss.) Bald.	Rubiaceae	
309.	*Galium recurvum* Req. ex DC., nom. illeg.	*Galium caminianum* Schult. & Schult.f.	Rubiaceae	
310.	*Tamarix passerinoides* var. *macrocarpa* Ehrenb.	*Tamarix macrocarpa* (Ehrenb.) Bunge	Tamaricaceae	
311.	*Anchusa aegyptiaca* (L.) A. DC.	*Lycopsis aegyptiaca* L.	Boraginaceae	
312.	*Anchusa aggregata* Lehm.	*Hormuzakia aggregata* (Lehm.) Gusuleac	Boraginaceae	
313.	*Eritrichium pusillum* Torr. & A. Gray.	*Johnstonella pusilla* (Torr. & A. Gray) Hasenstab & M. G. Simpson	Boraginaceae	
314.	*Nonea viviani* A. DC.	*Nonea vivianii* A. DC.	Boraginaceae	
315.	*Elizaldia calycina* (Roem. & Schult.) Maire.	*Nonea calycina* (Roem. & Schult.) Selvi, Bigazzi, Hilger & Papini	Boraginaceae	
316.	*Elizaldia calycina* subsp. *multicolor* (G. Kunze) Chater.	*Nonea calycina* (Roem. & Schult.) Selvi, Bigazzi, Hilger & Papini	Boraginaceae	
317.	*Elizaldia violacea* subsp. *Calycina* (Roem. & Schult.) Maire.	*Nonea calycina* (Roem. & Schult.) Selvi, Bigazzi, Hilger & Papini	Boraginaceae	
318.	*Echium setosum* Vahl.	*Echium rubrum* Forsk.	Boraginaceae	
319.	*Heliotropium ovalifolium* Forsk.	*Euploca ovalifolia* (Forsk.) Diane & Hilger	Boraginaceae	
320.	*Arnebia decumbens var. decumbens*	*Arnebia decumbens* subsp. *decumbens*	Boraginaceae	

NO.	Synonym (Flora of Libya)	Accepted Name (Catalogue of Life)	Family	New Family
321.	*Arnebia decumbens* subsp. *Macrocalyx* (Cosson & Kralik) Riedl	*Arnebia decumbens* var. *macrocalyx* Cosson & Kralik.	Boraginaceae	
322.	*Arnebia tetrastigma* Forsk.	*Arnebia tinctoria* Forsk.	Boraginaceae	
323.	*Onosma cyrenaicum* E. A. Durand & Barratte	*Onosma cyrenaica* E. A. Durand & Barratte	Boraginaceae	
324.	*Lithodora rosmarinifolia* (Ten.) I. M. Johnst.	*Glandora rosmarinifolia* (Ten.) D. C. Thomas	Boraginaceae	
325.	*Tamus communis* L.	*Dioscorea communis* (L.) Caddick & Wilkin	Dioscoreaceae	
326.	*Cytinus hypocistis* (L.) L.	*Cytinus hypocistis* (L.) L.	Rafflesiaceae	Cytinaceae
327.	*Cymodocea major* (Willd.) Grande.	*Cymodocea nodosa* (Ucria) Asch.	Cymodoceaceae	
328.	*Canna edulis* Ker Gawl.	*Canna indica* L.	Cannaceae	
329.	*Iris sisyrinchium* L.	*Moraea sisyrinchium* (L.) Ker Gawl.	Iridaceae	
330.	*Hermodactylus tuberosus* (L.) Mill.	*Iris tuberosa* L.	Iridaceae	
331.	*Verbena tenuisecta* Briq.	*Glandularia aristigera* (S.Moore) Tronc.	Verbenaceae	
332.	*Verbena peruviana* (L.) Britton.	*Glandularia peruviana* (L.) Small	Verbenaceae	
333.	*Lotononis platycarpos* (Viv.) Pic.Serm.	*Lotononis platycarpa* (Viv.)Pic.Serm	Fabaceae	
334.	*Lupinus varius* L., p.p.	*Lupinus pilosus* L.	Fabaceae	
335.	*Lupinus angustifolia* L.	*Lupinus angustifolius* L.	Fabaceae	
336.	*Psoralea plicata* Delile	*Cullen plicatum* (Delile) C.H.Stirt	Fabaceae	
337.	*Psoralea bituminosa* L.	*Bituminaria bituminosa* (L.)C.H.Stirt.	Fabaceae	
338.	*Indigofera semhaensis* Vierh.	*Microcharis disjuncta* (J.B.Gillett) Schrire	Fabaceae	
339.	*Astragalus stella* Gouan	*Astragalus stella* L	Fabaceae	
340.	*Astragalus pseudotrigonus* Batt. & Trab.	*Astragalus trigonus* DC.	Fabaceae	
341.	*Astragalus corrugatus* Bertol.	*Astragalus crenatus* Schult.	Fabaceae	
342.	*Astragalus hauarensis* Boiss.	*Astragalus arpilobus* subsp. *hauarensis* (Boiss.) D. Podl.	Fabaceae	
343.	*Astragalus vogelii* (Webb) Bornm.	*Podlechiella vogelii* subsp. *vogelii*	Fabaceae	
344.	*Astragalus pseudotrigonus* Batt. & Trabut.	*Astragalus trigonus* DC.	Fabaceae	
345.	*Biserrula pelecinus* L	*Astragalus pelecinus* subsp. *Pelecinus*	Fabaceae	
346.	*Hymenocarpos circinatus* (L.) Savi	*Hymenocarpos circinnatus* (L.)Savi	Fabaceae	
347.	*Lotus collinus* (Boiss.) Heldr.	*Lotus longesiliquosus* R.Roem.	Fabaceae	
348.	*Lotus suaveolens* Pers.	*Lotus hispidus* DC.	Fabaceae	
349.	*Lotus uliginosus* Schkuhr.	*Lotus pedunculatus* Cav.	Fabaceae	
350.	*Tetragonolobus purpureus* Moench.	*Lotus tetragonolobus* L.	Fabaceae	
351.	*Anthyllis tetraphylla* L.	*Tripodion tetraphyllum* (L.) Fourr.	Fabaceae	
352.	*Hippocrepis bicontorta* Loisel.	*Hippocrepis areolata* Desv.	Fabaceae	
353.	*Hedysarum glomeratum* F.Dietr.	*Hedysarum spinosissimum* subsp. *Capitatum* (Rouy) Asch. & Graebn.	Fabaceae	
354.	*Ononis angustissima* Lam.	*Ononis natrix* subsp. *angustissima* (Lam.) Sirj.	Fabaceae	
355.	*Ononis sicula* Guss.	*Ononis viscosa* subsp. *sicula* (Guss.) Hub.-Mor.	Fabaceae	
356.	*Trigonella monspeliaca* L.	*Medicago monspeliaca* (L.) Trautv.	Fabaceae	
357.	*Factorovskya aschersoniana* (Urb.) Eig	*Medicago hypogaea* E.Small	Fabaceae	
358.	*Medicago orbicularis* (L.) All.	*Medicago orbicularis* (L.) Bartal.	Fabaceae	
359.	*Medicago minima* (L.) Bartal.	*Medicago minima* (L.) L.	Fabaceae	
360.	*Cicer arientinum* L.	*Cicer arietinum* L.	Fabaceae	
361.	*Pisum elatius* M.Bieb.	*Pisum sativum* subsp. *elatius* (M.Bieb.) Asch. & Graebn.	Fabaceae	
362.	*Vicia laxiflora* Brot.	*Vicia parviflora* Cav.	Fabaceae	
363.	*Vicia sativa var. macrocarpa* (Moris)Arcang.	*Vicia sativa* subsp. *macrocarpa* (Moris) Arcang.	Fabaceae	
364.	*Vicia sativa var. macrocarpa* Moris	*Vicia sativa* subsp. *macrocarpa* (Moris) Arcang.	Fabaceae	
365.	*Vicia sativa var. sativa*	*Vicia sativa* subsp. *sativa*	Fabaceae	
366.	*Vicia sativa var. nigra* (L.) Ehrh.	*Vicia sativa* subsp. *nigra* (L.)Ehrh.	Fabaceae	
367.	*Vicia sativa var. cordata* (Hoppe) Asch. & Graebn.	*Vicia sativa* subsp. *cordata* (Hoppe) Asch. & Graebn.	Fabaceae	
368.	*Lathyrus gorgonei* Parl.	*Lathyrus gorgoni* Parl.	Fabaceae	
369.	*Arachis hypogea* L.	*Arachis hypogaea* L.	Fabaceae	
370.	*Crassula lycopodioides* Lam.	*Crassula muscosa* L.	Crassulaceae	
371.	*Umbilicus intermedius* Boiss.	*Umbilicus horizontalis* var. *intermedius* (Boiss.) Chamberlain	Crassulaceae	
372.	*Sedum sediforme* (Jacq.) Pau.	*Petrosedum sediforme* (Jacq.) V. Grulich	Crassulaceae	
373.	*Sedum cretense* Maire ex P. Quezel.	*Sedum creticum* var. *monocarpicum*	Crassulaceae	
374.	*Sedum mirum* Pampan.	*Umbilicus mirus* (Pampan.) W. Greuter	Crassulaceae	
375.	*Scrophularia arguta Aiton*	*Scrophularia arguta* Sol.	Scrophulariaceae	

NO.	Synonym (Flora of Libya)	Accepted Name (Catalogue of Life)	Family	New Family
376.	*Scrophularia hypercifolia* Wydl.	*Scrophularia hypericifolia* Wydl.	Scrophulariaceae	
377.	*Verbascum ballii* (Batt.) M. Qaiser.	*Verbascum ballii* (Batt.) Huber-Morath	Scrophulariaceae	
378.	*Linaria simplex* Desf.	*Linaria simplex* (Willd.) DC.	Scrophulariaceae	Plantaginaceae
379.	*Linaria laxiflora* subsp. *Calcarlongum* M. Qaiser.	*Linaria haelava* (Forssk.) Del.	Scrophulariaceae	Plantaginaceae
380.	*Kickxia acerbiana* (Boiss.) Tackh. & Boulos.	*Nanorrhinum acerbianum* subsp. *acerbianum*	Scrophulariaceae	Plantaginaceae
381.	*Kickxia aegyptiaca* (L.) Nábelek	*Kickxia aegyptiaca* (L.) Nábelek	Scrophulariaceae	Plantaginaceae
382.	*Kickxia aegyptiaca* subsp. *aegyptiaca*	*Kickxia aegyptiaca* subsp. *aegyptiaca*	Scrophulariaceae	Plantaginaceae
383.	*Kickxia aegyptiaca* subsp. *fruticosa* (Desf.) M. Qaiser.	*Kickxia aegyptiaca* subsp. *fruticosa* (Desf.) Wickens	Scrophulariaceae	Plantaginaceae
384.	*Chrozophora obliqua* (Vahl) A.Juss. ex Spreng.	*Chrozophora tinctoria* (L.) A.Juss.	Euphorbiaceae	
385.	*Chrozophora hierosolymitana* Spreng.	*Chrozophora tinctoria* (L.) A.Juss.	Euphorbiaceae	
386.	*Euphorbia forskalii* J.Gay	*Euphorbia forskaolii* J.Gay	Euphorbiaceae	
387.	*Casuarina stricta* Aiton.	*Allocasuarina verticillata* (Lam.) L. A. S. Johnson	Casuarinaceae	
388.	*Casuarina equisetifolia* Forst.	*Casuarina equisetifolia* L.	Casuarinaceae	
389.	*Casuarina torulosa* Aiton.	*Allocasuarina torulosa* (Ait.) L. A. S. Johnson	Casuarinaceae	
390.	*Casuarina decaisneana* F. Müll.	*Allocasuarina decaisneana* (F. Müll.) L. A. S. Johnson	Casuarinaceae	
391.	*Brachychiton populneum* (Schott & Endl.) R. Br.	*Brachychiton populneus* (Schott & Endl.) R. Br.	Sterculiaceae	Malvaceae
392.	*Myoporum serratum* R. Br.	*Myoporum insulare* R. Br.	Myoporaceae	Scrophulariaceae
393.	*Ficus salicifolia* Vahl.	*Ficus cordata* subsp. *salicifolia* (Vahl) C. C. Berg	Moraceae	
394.	*Adhatoda vasica* Nees.	*Justicia adhatoda* L.	Acanthaceae	
395.	*Jacobinia spicigera* (Schltdl.) L. H. Bailey.	*Justicia spicigera* Schltdl.	Acanthaceae	
396.	*Plumeria acutifolia* Poir.	*Plumeria rubra* L.	Apocynaceae	
397.	*Acokanthera oblongifolia* (Hochst.) Codd.	*Acokanthera oblongifolia* (Hochst.) Benth. & Hook. fil. ex B. D. Jacks.	Apocynaceae	
398.	*Thevetia yccotli* A. DC.	*Cascabela thevetioides* (Kunth) H. Lippold	Apocynaceae	
399.	*Tetragonia tetragonoides* (Pall.) O. Kuntze	*Tetragonia tetragonoides* (Pall.) O. Kuntze	Tetragoniaceae	Aizoaceae
400.	*Jacaranda ovalifolia* R. Br.	*Jacaranda mimosifolia* D. Don	Bignoniaceae	
401.	*Tecoma stans* var. *mollis* (Kunth) M. A. Siddiqi.	*Tecoma stans* var. *velutina* DC.	Bignoniaceae	
402.	*Tecomaria capensis* (Thunb.) Spach.	*Tecoma capensis* (Thunb.) Lindl.	Bignoniaceae	
403.	*Opuntia imbricata* (Haw.) DC.	*Cylindropuntia imbricata* (Haw.) F.M. Knuth	Cactaceae	
404.	*Bilderdykia baldschuanica* (Regel) D. A. Webb.	*Fallopia baldschuanica* (Regel) Holub	Polygonaceae	
405.	*Emex spinosa* (L.) Campd.	*Rumex spinosus* L.	Polygonaceae	
406.	*Rumex tingitanus* L.	*Rumex roseus* L.	Polygonaceae	
407.	*Polygonum salicifolium* Brouss. ex Willd.	*Persicaria salicifolia* subsp. *salicifolia*	Polygonaceae	
408.	*Conyza canadensis* (L.) Cronquist	*Erigeron canadensis* L.	Asteraceae	
409.	*Erigeron canadensis* L.	*Erigeron bonariensis* L.	Asteraceae	
410.	*Conyza aegyptiaca* (L.) Dryand.	*Nidorella aegyptiaca* (L.) J. C. Manning & Goldblatt	Asteraceae	
411.	*Ifloga spicata* (Forsk.) Sch. Bip.	This is an ambiguous synonym for: Ifloga spicata subsp.spicata	Asteraceae	
412.	*Evax mauritanica* (Pomel) Batt.	*Filago mauritanica* (Pomel) Dobignard	Asteraceae	
413.	Evax pygmaea (L.) Brot.	*Filago pygmaea subsp. pygmaea*	Asteraceae	
414.	*Evax libyaca* S.A. Alavi	*Filago libyaca* (Alavi) Greuter & Wagenitz	Asteraceae	
415.	Evax contracta Boiss.. Diagn.	*Filago contracta* (Boiss.) Chrtek & Holub	Asteraceae	
416.	*Evax argentea* Pomel	*Filago argentea* (Pomel) Chrtek & Holub	Asteraceae	
417.	*Evax asterisciflora* (Lam.) Pers.	*Filago asterisciflora* (Lam.) Sw.	Asteraceae	
418.	*Inula crithmoides* L.	*Limbarda crithmoides* subsp. *crithmoides*	Asteraceae	
419.	*Francoeuria crispa* (Forsk.) Cass.	*Pulicaria undulata subsp. undulata*	Asteraceae	
420.	*Francoeuria laciniata* Coss. & Dur.	*Pulicaria laciniata* (Coss. & Kral.) Thell.	Asteraceae	
421.	*Jasonia glutinosa* (L.) DC.	*Chiliadenus glutinosus* (L.) Fourr	Asteraceae	
422.	*Jasonia rupestris* Pomel	*Chiliadenus rupestris* (Pomel) Brullo	Asteraceae	
423.	*Varthemia candicans* (Del.) Boiss.	*Chiliadenus candicans* (Del.) Brullo	Asteraceae	
424.	*Varthemia sericea* (Batt. & Trabut) Diels.	*Chiliadenus sericeus* subsp. *sericeus*	Asteraceae	
425.	*Asteriscus pygmaeus* (DC.) Coss. & Dur.	*Pallenis hierochuntica* (Michon) W. Greuter	Asteraceae	

NO.	Synonym (Flora of Libya)	Accepted Name (Catalogue of Life)	Family	New Family
426.	*Anthemis krugeriana*	*Anthemis kruegeriana*	Asteraceae	
427.	*Achillea santolina* L.	*Achillea tenuifolia* Lam.	Asteraceae	
428.	*Chamaemelum mixtum* (L.) All.	*Cladanthus mixtus* (L.) Chevall.	Asteraceae	
429.	*Tripleurospermum fuscatum* (Desf.) Sch. Bip.	*Heteromera fuscata* (Desf.) Pomel	Asteraceae	
430.	*Tripleurospermum philaenorum* (Maire & Weiller) S.A. Alavi.	*Heteromera philaenorum* Maire & Weiller	Asteraceae	
431.	*Chamomilla recutita* (L.) Rauschert.	*Matricaria chamomilla* L.	Asteraceae	
432.	*Chamomilla pubescens* (Desf.) S.A. Alavi.	*Aaronsohnia pubescens* subsp. *pubescens*	Asteraceae	
433.	*Chamomilla aurea* (Loefl.) Gay ex Coss. & Kralik.	*Matricaria aurea* (L.) Sch. Bip.	Asteraceae	
434.	*Anacyclus cyrtolepidioides* Pomel.	*Anacyclus monanthos* subsp. *cyrtolepidioides* (Pomel) C.J. Humphries	Asteraceae	
435.	*Otanthus maritimus* (L.) Hoffm. & Lk.	*Achillea maritima* subsp. *maritima*	Asteraceae	
436.	*Chrysanthemum segetum* L.	*Glebionis segetum* (L.) Fourr.	Asteraceae	
437.	*Chrysanthemum carinatum* Schousboe.	*Glebionis carinata* (Schousb.) N.N. Tzvel.	Asteraceae	
438.	*Chrysanthemum coronarium* L.	*Glebionis coronaria* (L.) N.N. Tzvel.	Asteraceae	
439.	*Leucanthemopsis trifurcata* (Desf.) S.A. Alavi.	*Chrysanthoglossum trifurcatum* (Desf.) B.H. Wilcox, K. Bremer & C.J. Humphries	Asteraceae	
440.	*Prolongoa macrocarpa* (Sch. Bip.) S.A. Alavi.	*Endopappus macrocarpus* subsp. *macrocarpus*	Asteraceae	
441.	*Hymenostemma paludosum* (Poir.) Pomel.	*Mauranthemum paludosum* subsp. *paludosum*	Asteraceae	
442.	*Cotula cinerea* Del.	*Brocchia cinerea* (Del.) Vis.	Asteraceae	
443.	Senecio angulata L. fil.	*Senecio angulatus* L. fil.	Asteraceae	
444.	*Carduus pteracanthus* Dur.	*Carduus spachianus* subsp. *spachianus*	Asteraceae	
445.	*Onopordum confusum* Pamp.	*Onopordum platylepis* (Murb.) Murb	Asteraceae	
446.	*Serratula cichoracea* (L.) DC.	*Klasea flavescens* subsp. *cichoracea* (L.) Greuter & Wagenitz	Asteraceae	
447.	*Amberboa leucantha* Coss. ex Batt.	*Volutaria sinaica* (DC.) Wagenitz	Asteraceae	
448.	*Amberboa tubuliflora* Murb.	*Volutaria tubuliflora* (Murb.) Sennen	Asteraceae	
449.	*Amberboa lippii* (L.) DC.	*Volutaria lippii* subsp. *lippii*	Asteraceae	
450.	*Amberboa crupinoides* (Desf.) DC	*Volutaria crupinoides* (Desf.) Maire	Asteraceae	
451.	*Amberboa libyca* (Viv.) S.A. Alavi	*Volutaria crupinoides* (Desf.) Maire	Asteraceae	
452.	*Cyanopsis muricata* (L.) Dostál.	*Volutaria muricata* (L.) Maire	Asteraceae	
453.	*Centaurea africana* Lam.	*Rhaponticoides africana* (Lam.) M. V. Agab. & Greuter	Asteraceae	
454.	*Centaurea pumilio* L.	*Crocodylium pumilio* (L.) N.Garcia & Susanna	Asteraceae	
455.	*Centaurea aegialophila* Boiss. & Heldr. ex Boiss.	*Crocodylium creticum* (Boiss. & Heldr.) N.Garcia & Susanna	Asteraceae	
456.	*Crupina vulgaris* Cass.	*Crupina vulgaris* (Pers.) Cass.	Asteraceae	
457.	*Cnicus benedictus* L.	*Centaurea benedicta* (L.) L.	Asteraceae	
458.	*Consolida ambigua* (L.) P. W. Ball & Heywood.	*Consolida ajacis* (L.) Schur	Ranunculaceae	
459.	*Ranunculus saniculifolius* Viv.	*Ranunculus peltatus* subsp. *fucoides* (Freyn) Munoz Garmendia	Ranunculaceae	
460.	*Ranunculus ficaria* L.	*Ficaria verna* subsp. *verna*	Ranunculaceae	
461.	*Limonium pruinosum* var. *hirtiflorum* (Cavara) Maire & Weiller.	*Limonium pruinosum* (L.) Chaz.	Plumbaginaceae	
462.	*Limonium oleifolium* Mill.	*Limonium virgatum* subsp. *virgatum*	Plumbaginaceae	
463.	*Callitriche brutia* Petagna	*Callitriche brutia* Petagna	Callitrichaceae	Plantaginaceae
464.	*Lemna minor* L.	*Lemna minor* L.	Lemnaceae	Araceae
465.	*Lemna gibba* L.	*Lemna gibba* L.	Lemnaceae	Araceae
466.	*Najas marina* L.	*Najas marina* L.	Najadaceae	Hydrocharitaceae
467.	*Najas minor* All.	*Najas minor* All.	Najadaceae	Hydrocharitaceae
468.	*Potamogeton pectinatus* L.	*Stuckenia pectinata* (L.) Börner	Potamogetonaceae	
469.	*Putoria calabrica* (L.f.) DC.	*Plocama calabrica* (L.f.) M.Backlund & Thulin	Rubiaceae	
470.	*Valantia lanata* Delile ex Coss., nom. nud.	*Valantia columella* (Ehrenb. ex Boiss.) Bald.	Rubiaceae	
471.	*Galium recurvum* Req. ex DC., nom. illeg.	*Galium caminianum* Schult. & Schult.f.	Rubiaceae	
472.	*Zannichellia palustris* L.	*Zannichellia palustris* L.	Zannichelliaceae	Potamogetonaceae
473.	*Eryngium barrelieri* Boiss.	*Eryngium pusillum* Desf.	Apiaceae	
474.	*Bifora testiculata* (L.) DC.	*Bifora testiculata* (L.) Roth	Apiaceae	
475.	*Scaligeia cretica* (Mill.) Boiss.	*Scaligeria napiformis* (Willd. ex Spreng.) Grande	Apiaceae	
476.	*Bunium incrassatum* (Boiss.) Batt.	*Bunium pachypodum* P. W. Ball	Apiaceae	

NO.	Synonym (Flora of Libya)	Accepted Name (Catalogue of Life)	Family	New Family
477.	*Pituranthos tortuousus* (Desf.) Benth. & Hook. ex Aschers. & Schweinf.	*Deverra tortuosa* (Desf.) DC.	Apiaceae	
478.	*Pituranthos denudatus* Viv.	*Deverra denudata* subsp. *denudata*	Apiaceae	
479.	*Pituranthos denudatus* subsp. *battandieri* (Maire) S. M. H. Jafri.	*Deverra battandieri* (Maire) D. Podlech	Apiaceae	
480.	*Pituranthos scoparius* (Coss. & Durieu) Schinz.	*Deverra scoparia* subsp. *scoparia*	Apiaceae	
481.	*Pituranthos rholfsianus* (Aschers. apud Rohlfs) Schinz.	*Deverra scoparia* subsp. *Tripolitana* (Andreansky) R. Pfisterer & D. Podlech	Apiaceae	
482.	*Athamanta della-cellae* Aschers. & Barbey ex Coss.	*Daucus della-cellae* (Asch. & Barbey ex E. A. Durand & Barratte) Spalik, Banasiak & Reduron	Apiaceae	
483.	*Feoniculum vulgare* Mill.	*Foeniculum vulgare* Mill.	Apiaceae	
484.	*Foeniculum vulgare* var. *dulce* (Mill.) Cout.	*Foeniculum vulgare* Mill.	Apiaceae	
485.	*Bupleurum gerardii* Gaertn. Mey. & Scherb.	*Bupleurum tenuissimum* L.	Apiaceae	
486.	*Apium nodiflorum* (L.) Lag.	*Helosciadium nodiflorum* (L.) Koch	Apiaceae	
487.	*Apium leptophyllum* (Pers.) F. Müll. ex Benth.	*Cyclospermum leptophyllum* (Pers.) Sprague	Apiaceae	
488.	*Petroselinum crispum* (Mill.) A. W. Hill.	*Petroselinum crispum* subsp. *crispum*	Apiaceae	
489.	*Ammi visnaga* (L.) Lam.	*Visnaga daucoides* Gaertn.	Apiaceae	
490.	*Brachyapium dichotomum* (L.) Maire.	*Stoibrax dichotomum* (L.) Raf.	Apiaceae	
491.	*Ferula cossoniana* Batt.	*Ferula longipes* Coss. ex Bonn. & Maury	Apiaceae	
492.	*Ferula lutea* (Poir.) Maire.	*Ferulago lutea* (Poir.) Grande	Apiaceae	
493.	*Opopanax chironum* (L.) Koch	*Opopanax chironium* (L.) Koch	Apiaceae	
494.	*Malabaila suaveolens* Del. ex Cosson.	*Leiotulus alexandrinus* Ehrenb.	Apiaceae	
495.	*Elaeoselinum asclepium* (L.) Bertol.	*Thapsia asclepium* subsp. *asclepium*	Apiaceae	
496.	*Torilis heterophylla* Guss.	*Torilis africana* Spreng.	Apiaceae	
497.	*Torilis bifrons* (Pomel) S. M. H. Jafri.	*Torilis elongata* (Hoffm. & Link) G. Sampaio	Apiaceae	
498.	*Pachyctenium mirabilis* Maire & Pampan.	*Daucus mirabilis* (Maire & Pamp.) Reduron, Banasiak & Spalik	Apiaceae	
499.	*Pseudorlaya pumila* (L.) Grande.	*Daucus pumilus* (L.) Hoffm. & Link	Apiaceae	
500.	*Mentha piperata* L.	*Mentha piperita* L.	Lamiaceae	
501.	*Teucrium pilosum* (Decne.) Asch. & Schweinf.	*Teucrium decaisnei* C.Presl	Lamiaceae	
502.	*Rosmarinus officinalis* L	*Salvia rosmarinus* Schleid.	Lamiaceae	
503.	*Salvia aegyptiaca* L.	*Pleudia aegyptiaca* (L.) M.Will, N.Schmalz & Class.-Bockh.	Lamiaceae	
504.	*Salvia chudaei* Batt. & Trab.	*Pleudia chudaei* (Batt. & Trab.) M.Will, N.Schmalz & Class.-Bockh.	Lamiaceae	
505.	*Marrubium deserti* (de Noé) Coss.	*Ballota deserti* (de Noé) Jury, Rejdali & A.J.K.Griffiths	Lamiaceae	
506.	*Sideritis curvidens* Stapf.	*Sideritis romana* subsp. *curvidens* (Stapf) Holmboe	Lamiaceae	
507.	*Ballota pseudo-dictamnus* (L.) Benth.	*Ballota pseudodictamnus* (L.) Benth.	Lamiaceae	
508.	*Calamintha incana* (Sm.) Boiss.	*Clinopodium insulare* (Candargy) Govaerts	Lamiaceae	
509.	*Thymus capitatus* (L.) Hoffmanns. & Link.	*Thymbra capitata* (L.) Cav.	Lamiaceae	
510.	*Satureja fortii* Pamp.	*Micromeria nervosa* (Desf.) Benth.	Lamiaceae	
511.	*Micromeria microhpylla* (d'Urv.) Benth.	*Micromeria microphylla* (d'Urv.) Benth.	Lamiaceae	
512.	*Barlia robertiana* (Loisel.) Greuter.	*Himantoglossum robertianum* (Loisel.) P.Delforge	Orchidaceae	
513.	*Ophrys fusca* var. *fusca*	*Ophrys fusca* subsp. *fusca*	Orchidaceae	
514.	*Ophrys fusca var. iricolor* (Desf.) K.Richt.	*Ophrys fusca* subsp. *iricolor* (Desf.) K.Richt.	Orchidaceae	
515.	*Ophrys rosea* (Desf.) Dufour.	*Ophrys tenthredinifera* Willd.	Orchidaceae	
516.	*Ophrys holoserica* (Burm.f.) Greuter.	*Ophrys apifera* Huds.	Orchidaceae	
517.	*Orchis coriophora* L.	*Anacamptis coriophora* (L.) R.M.Bateman, Pridgeon & M.W.Chase	Orchidaceae	
518.	*Orchis papilionacea* L.	*Anacamptis papilionacea* (L.) R.M.Bateman, Pridgeon & M.W.Chase	Orchidaceae	
519.	*Orchis cyrenaica* E.A.Durand & Barratte	*Anacamptis cyrenaica* (E.A.Durand & Barratte) H.Kretzschmar, Eccarius & H.Dietr.	Orchidaceae	
520.	*Orchis collina* Banks & Sol. ex Russell.	*Anacamptis collina* (Banks & Sol. ex Russell) R.M.Bateman, Pridgeon & M.W.Chase	Orchidaceae	

NO.	Synonym (Flora of Libya)	Accepted Name (Catalogue of Life)	Family	New Family
521.	*Cyperus mundtii* (Nees) Kunth	*Cyperus mundii* (Nees) Kunth	Cyperaceae	
522.	*Cyperus kalli* (Forssk.) Murb	*Cyperus capitatus* Vand.	Cyperaceae	
523.	*Eleocharis caribaea* (Rottb.) S.F.Blake.	*Eleocharis geniculata* (L.) Roem. & Schult.	Cyperaceae	
524.	*Scirpus maritimus* L.	*Bolboschoenus maritimus* (L.) Palla	Cyperaceae	
525.	*Scirpus holoschoenus* L.	*Scirpoides holoschoenus* (L.) Soják	Cyperaceae	
526.	*Scirpus cernuus* Vahl.	*Isolepis cernua* (Vahl) Roem. & Schult.	Cyperaceae	
527.	*Scirpus litoralis* Schrad.	*Schoenoplectus litoralis* (Schrad.) Palla	Cyperaceae	
528.	*Scirpus lacustris* L.	*Schoenoplectus lacustris* (L.) Palla	Cyperaceae	
529.	*Sansevieria zeylanica* Willd. var. *laurentii* Hort., Bailey	*Sansevieria trifasciata* Prain	Agavaceae	
530.	*Agave ferox* K.Koch.	*Agave salmiana* var. *ferox* (K.Koch) Gentry	Agavaceae	
531.	*Agave celsii* Hook.	*Agave mitis* Mart.	Agavaceae	
532.	*Furcraea selloa* K.Koch	*Furcraea selloana* K.Koch	Agavaceae	
533.	*Polianthes tuberosa* L.	*Agave polianthes* Thiede & Eggli, nom. superfl.	Agavaceae	
534.	*Feijoa sellowiana* (O. Berg) O. Berg.	*Acca sellowiana* (Berg) Burret	Myrtaceae	
535.	*Eucalyptus erithrocorys* F. Müll.	*Eucalyptus erythrocorys* F. Müll.	Myrtaceae	
536.	*Eucalyptus rudris* Endl.	*Eucalyptus rudis* Endl.	Myrtaceae	
537.	*Argania spinosa* (L.) Skeels.	*Sideroxylon spinosum* L.	Sapotaceae	
538.	*Eunonymus japonicus* Thunb.	*Euonymus japonicus* Thunb.	Celastraceae	
539.	*Passiflora coerulea* L.	*Passiflora caerulea* L.	Passifloraceae	
540.	*Ulmus umbraculifera* (Trautv.) Zielinski.	*Ulmus minor* subsp. *minor*	Ulmaceae	
541.	*Sparganium neglectum* Beeby.	*Sparganium erectum* subsp. *neglectum* (Beeby) K.Richt	Sparganiaceae	
542.	*Acer negundo* L.	*Acer negundo* L.	Aceraceae	Sapindaceae
543.	*Buddleja asiatica* Lour.	*Buddleja asiatica* Lour.	Buddlejaceae	Scrophulariaceae
544.	*Nicodemia madagascariensis* (Lam.) R. Parker.	*Buddleja madagascariensis* Lam.	Buddlejaceae	Scrophulariaceae
545.	*Begonia semperflorens* Link & Otto.	*Begonia cucullata* var. *cucullata*	Begoniaceae	
546.	*Bombax ceiba* L.	*Bombax ceiba* L.	Bombacaceae	Malvaceae
547.	Salix subserrata	*Salix mucronata* subsp. *subserrata* (Willd.) R.H.Archer & Jordaan	Salicaceae	
548.	*Populus nigra* L. var *afghanica* Aitch. et Hemsley	*Populus afghanica* (Aitch. & Hamsl.) Schneid.	Salicaceae	
549.	*Zebrina pendula* Schnizl.	*Tradescantia zebrina* var. *zebrina*	Commelinaceae	
550.	*Setcreasea purpurea* Boom.	*Tradescantia pallida* (Rose) D.R.Hunt	Commelinaceae	
551.	*Tradescantia albiflora* Kunth	*Tradescantia fluminensis* Vell.	Commelinaceae	
552.	*Rhoeo spathacea* (Sw.) Stearn.	*Tradescantia spathacea* Sw.	Commelinaceae	
553.	*Festuca arundinacea* Schreb., nom. cons.	*Lolium arundinaceum* (Schreb.) Darbysh.	Poaceae	
554.	Vulpia inops (DeL) Hackel	*Vulpia brevis* Boiss. & Kotschy	Poaceae	
555.	*Vulpiella tenuis* (Tineo) Kerguelen.	*Vulpiella stipoides* (L.) Maire	Poaceae	
556.	*Cutandia memphitica* (Spreng.) Richter	*Cutandia memphitica* (Spreng.) Benth.	Poaceae	
557.	*Catapodium hemipoa* (Delile ex Spreng.) Laínz.	*Catapodium rigidum* subsp. *hemipoa* (Delile ex Spreng.) Kerguélen	Poaceae	
558.	*Ctenopsis pectinella* (Delile) De Not.	*Vulpia pectinella* (Delile) Boiss.	Poaceae	
559.	*Ampelodesmos mauritanica* (Poir.) T.Durand & Schinz	*Ampelodesmos mauritanicus* (Poir.) T.Durand & Schinz	Poaceae	
560.	*Poa trivialis* subsp. *sylvicola* (Guss.) H.Lindb.	*Poa trivialis* L.	Poaceae	
561.	*Poa annua* subsp. *pilantha* (Ronniger) H.Scholz.	*Poa annua* L.	Poaceae	
562.	*Poa annua* var. *pilantha* Ronniger.	*Poa annua* L.	Poaceae	
563.	*Bromus caroli-henrici* Greuter.	*Bromus alopecuros* subsp. *caroli-henrici* (Greuter) P.M.Sm.	Poaceae	
564.	*Bromus caroli-henrici* subsp. *biaristulatus* (Maire) H.Scholz.	*Bromus alopecuros* subsp. *alopecuros*	Poaceae	
565.	*Bromus molliformis* J.Lloyd ex Billot.	*Bromus hordeaceus* subsp. *Divaricatus* (Bonnier & Layens) Kerguélen	Poaceae	
566.	*Aegilops triuncialis* var. *brachyathera* Boiss	*Aegilops peregrina* (Hack.) Maire & Weiller	Poaceae	
567.	*Triticum bicorne* Forssk.	*Aegilops bicornis* (Forssk.) Jaub. & Spach	Poaceae	
568.	*Triticum turgidum* subsp. *durum* (Desf.) Husn.	*Triticum durum* Desf.	Poaceae	

NO.	Synonym (Flora of Libya)	Accepted Name (Catalogue of Life)	Family	New Family
569.	*Triticum turgidum* subsp. *polonicum* (L.) Thell.	*Triticum polonicum* L	Poaceae	
570.	*Triticum aestivum* subsp. *spelta* (L.) Thell.	*Triticum spelta* L.	Poaceae	
571.	*Elytrigia repens* (L.) Nevski.	*Elymus repens* (L.) Gould	Poaceae	
572.	*Elytrigia Iittoralis* (Host) Hyl.	*Elytrigia littoralis* (Mutel) Hyl.	Poaceae	
573.	*Elytrigia juncea* (L.) Nevski.	*Thinopyrum junceum* (L.) Á.Löve	Poaceae	
574.	*Hordeum geniculatum* All.	*Hordeum marinum* subsp. *gussoneanum* (Parl.) Thell.	Poaceae	
575.	*Avenula bromoides* (Gouan) H.Scholz.	*Helictochloa bromoides* (Gouan) Romero Zarco	Poaceae	
576.	*Avenula bromoides* subsp. *australis* (Parl.) H.Scholz.	*Helictochloa cincinnata* (Ten.) Romero Zarco	Poaceae	
577.	*Lophochloa pumila* (Desf.) Bor.	*Rostraria pumila* (Desf.) Tzvelev	Poaceae	
578.	*Lophochloa salzmannii* (Boiss.) H.Scholz.	*Rostraria salzmannii* (Boiss.) Holub	Poaceae	
579.	*Lophochloa pubescens* (Lam.) H.Scholz.	*Rostraria litorea* (All.) Holub	Poaceae	
580.	*Lophochloa rohlfsii* (Asch.) H.Scholz.	*Rostraria rohlfsii* (Asch.) Holub	Poaceae	
581.	*Lophochloa cristata* (L.) Hyl.	*Rostraria cristata* (L.) Tzvelev	Poaceae	
582.	*Avellinia michelii* (Savi) Parl.	*Rostraria festucoides* (Link) Romero Zarco	Poaceae	
583.	*Aira tenorii* Guss.	*Aira tenorei* Guss.	Poaceae	
584.	*Ammophila australis* (Mabille) Porta & Rigo.	*Ammophila arenaria* subsp. *australis* (Mabille) M.Laínz	Poaceae	
585.	*Polypogon semiverticillatus* (Forssk.) Hyl	*Polypogon viridis* (Gouan) Breistr	Poaceae	
586.	*Gastridium scabrum* C.Presl.	*Gastridium ventricosum* (Gouan) Schinz & Thell.	Poaceae	
587.	*Alopecurus mysuroides* Huds.	*Alopecurus myosuroides* Huds.	Poaceae	
588.	*Alopecurus urticulatus Banks et Sol.*.	*Alopecurus utriculatus* Sol.	Poaceae	
589.	*Libyella cyrenaica* (E.A.Durand & Barratte) Pamp.	*Poa cyrenaica* E.A.Durand & Barratte	Poaceae	
590.	*Phalaris paradoxa* var. *praemorsa* (Lam.) Coss. & Durieu.	*Phalaris paradoxa* L.	Poaceae	
591.	*Asthenatherum forsskalii* (Vahl) Nevski.	*Centropodia forsskalii* (Vahl) Cope	Poaceae	
592.	*Asthenatherum fragile* (Guinet & Sauvage) Monod	*Centropodia fragilis* (Guinet & Sauvage) Cope	Poaceae	
593.	*Stipa nitens* (Ball) Ball.	*Stipellula nitens* (Ball) Röser & Hamasha	Poaceae	
594.	*Stipa parviflora* Desf.	*Stipellula parviflora* (Desf.) Röser & Hamasha	Poaceae	
595.	*Piptatherum miliaceum* (L.) Coss.	*Achnatherum miliaceum* (L.) P.Beauv.	Poaceae	
596.	*Aristida meccana* Hochst. ex Trin. & Rupr.	*Aristida mutabilis* Trin. & Rupr.	Poaceae	
597.	*Stipagrostis zittelii* (Asch.) De Winter	*Stipagrostis acutiflora* (Trin. & Rupr.) De Winter	Poaceae	
598.	*Stipagrostis acutiflora* subsp. *algeriensis* (Henrard) H.Scholz	*Stipagrostis acutiflora* (Trin. & Rupr.) De Winter	Poaceae	
599.	*Eleusine compressa* (Forssk.) Asch. & Schweinf. ex C.Chr.	*Chloris flagellifera* (Nees) P.M.Peterson	Poaceae	
600.	*Crypsis schoenoides* (L.) Lam.	*Sporobolus schoenoides* (L.) P.M.Peterson	Poaceae	
601.	*Paspalum paspalodes* (Michx.) Scribn.	*Paspalum distichum* L.	Poaceae	
602.	*Paspalidium geminatum* (Forssk.) Stapf.	*Setaria geminata* (Forssk.) Veldkamp	Poaceae	
603.	*Setaria adhaerens* (Forssk.) Chiov.	*Setaria verticillata* (L.) P.Beauv.	Poaceae	
604.	*Setaria glauca* (L.) P.Beauv.	*Cenchrus americanus* (L.) Morrone	Poaceae	
605.	*Pennisetum divisum* (J.F.Gmel.) Henrard.	*Cenchrus divisus* (J.F.Gmel.) Verloove, Govaerts & Buttler	Poaceae	
606.	*Pennisetum elatum* Hochst. ex Steud.	*Cenchrus divisus* (J.F.Gmel.) Verloove, Govaerts & Buttler	Poaceae	
607.	*Pennisetum setaceum* (Forssk.) Chiov.	*Cenchrus setaceus* (Forssk.) Morrone	Poaceae	
608.	*Pennisetum americanum* (L.) Leeke.	*Cenchrus americanus* (L.) Morrone	Poaceae	
609.	*Cenchrus incertus* M.A.Curtis.	*Cenchrus spinifex* Cav.	Poaceae	
610.	*Lasiurus hirsutus* Boiss., nom. superfl.	*Lasiurus scindicus* Henrard	Poaceae	
611.	*Trachynia distachya* (L.) Link.	*Brachypodium distachyon* (L.) P.Beauv.	Poaceae	
612.	*Sambucus nigra* L.	*Sambucus nigra* L.	Sambucaceae	Adoxaceae
613.	*Dovyalis caffra* (Hook. fil. ex Harv. & Sond.) Warb.	*Dovyalis caffra* (Hook. fil. ex Harv. & Sond.) Warb.	Flacourtiaceae	Salicaceae

Conclusion

Our update names of the Flora of Libya have resulted in the essential of a large number of nomenclatural changes. The information gleaned for our update names of the flora of Libya from the World Checklist of Selected Plant Families. Facilitated by the Royal Botanic Gardens, Kew, the International Plant Names Index and World Checklist of Vascular Plants, The Catalogue of life, and Index synonymique de la flore d'Afrique du Nord websites, as there are currently no plans for preparing a new national flora and there is no online database. We have undergone extensive review since the 80s version of the flora of Libya by Al Gadi & Jafri, and are subject to change as we continue to learn more about the plants in Libyan County.

References:

Ali, S .I;. Jafri, S. M. H. (1976 - 1977). Flora of Libya. Vol. 1—24, Department of Botany, Al- Faateh Univ., Tripoli, Libya.

Ali, S. I; Jafri S. M. H; El-Gadi A. (1976-1989). Flora of Libya. Vols. 1—147, Department of Botany, Al-Fatah University, Tripoli, Libya.

APD, (2022). African Plants Database. Genève : Conservatoire et Jardin botaniques de la Ville de Genève; Pretoria (SA): South African, South African National Biodiversity Institute. http://www.ville-ge.ch/musinfo/bd/cjb/africa

Boulos, L. (1972). Our Present Knowledge of the Flora and Vegetation of Libya. *Webbia*, 26: 366—400.

BOULOS, L., (1977). A check-list of the Libyan flora: 1. Introduction and Adiantaceae - Orchidaceae. *Publications of Cairo University Herbarium, nos* 7—8: 115—141.

Brullo S. & Furnari F. (1988). La vegetazione costiera della Cirenaica. Bollettino Accademia Gioenia di Scienze Naturali Catania 21 (334): 37—117

Catalogue of life: www.catalogueoflife.org

Corti, R. (1942). Flora e Vegetazione del Fezzan e della Regione di Gat. Reale Società Geografica Italiana. – Firenze.

Dobignard, A. and Chatelain, C. (2010–2013). Index synonymique de la flore d'Afrique du Nord. 5 tomes. Geneva, Switzerland: Éditions des Conservatoire et Jardin Botaniques.

Durand, E., Barratte, G., Ascherson, P., Barbey, W., Muschler, R. & Meunier, S. (1910) *Florae Libycae Prodromus, ou, Catalogue Raisonné des plantes de Tripolitaine, Vols. 1–2.* Imprimerie Romet, Froreisen Successeut, Geneve.

El-Barasi, Y.M., El-Sherif, I.M., Gawhari, A.M.H. (2003). Checklist and analysis of the flora and vegetation of Wadi Zaza at Al-Jabal Al Akhdar (Cyrenaica, Libya). *Bocconea*. 16:1091-1105.

El-Sherif, M., El-Barasi, Y., Mugasabi, M., Shakmak, Y., Gomaa, M. (1991). A contribution to the flora of Wadi-Murqus (Gabel El-Akhder, Libya). *Acta Botanica Indica*. 19:232-235.

Essokne, R. S; Jury, S. L. (2015). Report on a visit to Jebel Akhdar (Cyrenaica, Libya). *Fl. Medit*. 25: 79—85.

Essokne, R., Mohammed H. Mahklouf,.(2023). Index to New updated names of the Flora of Libya. *Journal of science*. 16: 41—52.

Euro+Med. (2012) Euro+Med PlantBase - the information resource for Euro Mediterranean plant diversity. Available from*:* *http://ww2.bgbm.org/EuroPlusMed/* (accessed 29 March 2014)

FAO. (1996). COUNTRY REPORT TO THE FAO INTERNATIONAL TECHNICAL CONFERENCE ON PLANT GENETIC RESOURCES https://www.fao.org/fileadmin/templates/agphome/documents/PGR/SoW1/east/LIBYA.pdf

Gawhari, A.M., Jury, S.L. and Culham, A. (2018). 'Towards an updated checklist of the Libyan flora'. *Phytotaxa* 338(1):1–16.

IPNI (International Plant Names Index). (2020). Available athttps://www.ipni.org. Consulted on 11 May 2020.

Kheith, H. G. (1965). A preliminary check list of Libyan Flora. Ministry of Agriculture. Libya.

Klopper, R. R; Gautier, L; Chatelain, C; Smith, G. F; Spichiger, R. (2007). Floristics of the angiosperm flora of subSahara African: an analysis of the Africa Plant Checklist and Database. *Taxon* .56, 201—208.**Mahklouf, M; Etayeb, K.** (2019). Global biodiversity (selected countries in Africa (edi. Pullaiah, T). *Apple Academic Press, Inc - CRC Press, a member of Taylor & Francis Group*. Vol. 3 Ch 5. 113 – 133.

Pampanini, R. (1931) *Prodromo della Flora Cirenaica.* Tipografia Valbonesi, Forlì, 577 pp.

Plants of the world (Royal Botanic Gardens) https://powo.science.kew.org

Qaiser, M; El –Gadi. A. (1994). A critical analysis of the flora of Libya. *Libyan J.Sci*. 13:31—40.

The Plant List. (2013) Version 1.1. Available from: http://www.theplantlist.org/ (accessed 31 July 2015)

Viviani, D. (1824) Florae libycae specimen, sive plantarum enumeratio Cyrenaicam, Pentapolim, magnae syrteos desertum et regionem Tripolitanam incolentium*:* Pagano.

WCSP. (2017) World Checklist of Selected Plant Families*. Facilitated by the Royal Botanic Gardens, Kew.* Available from: http://wcsp.science.kew.org (accessed 4 January 2018)