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Plant collections for saltland revegetation and soil conservation

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An earlier publication with a similar title, Technical Bulletin No. 21 was issued in 1973. Other publications in this series included Technical Bulletins Nos. 6 and 8.

Introduction

About 300,000 ha of crop and pasture land in south-western Australia has become salt-affected since development for agriculture. Research aimed at returning the land to production includes studies of catchment hydrology and drainage techniques and the growth of salt tolerant plants to provide feed for sheep.

In 1966 and 1967 the senior author made an overseas plant exploration trip to collect seeds of plants of reputed salt tolerance and forage value. The trip was intended to supply a range of plants suited to the different ecological niches which characterise salt affected areas in Western Australia.

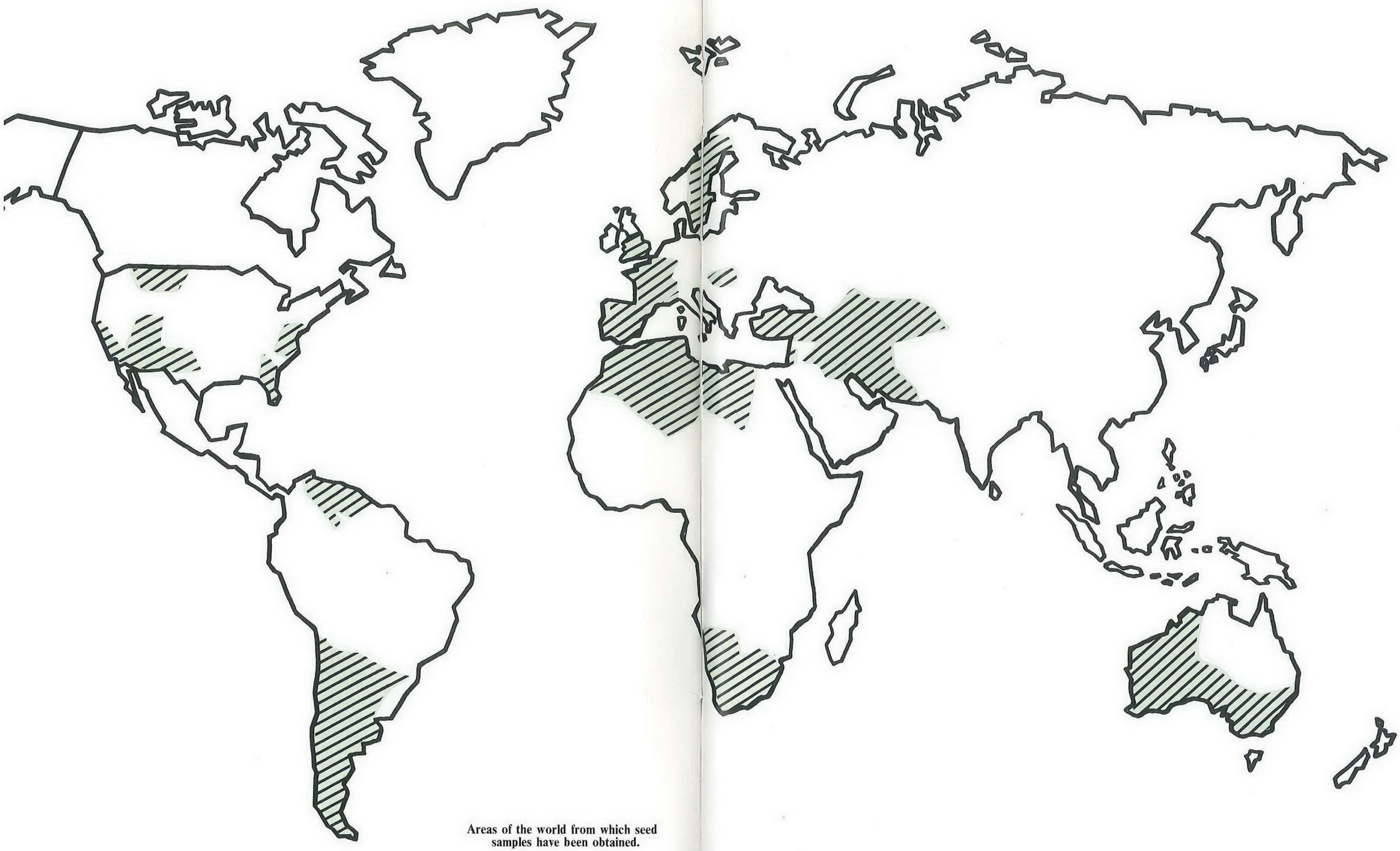
The purpose of the original collection trip was to obtain a comprehensive collection of *Puccinellia* species, a perennial grass from the Mediterranean region, which had performed well on Western Australian saltland, and to collect other shrubs, grasses and forbs for forage production under saline and arid conditions in the South-West and Eremaean Provinces of Western Australia.

The south-west of Australia enjoys a mediterranean type climate with hot dry summers and cool wet winters. Countries with somewhat similar climatic conditions were selected for the plant exploration studies. However, special attention was also given to the salt desert shrub environments in the United States of America in the States of Arizona, New Mexico and Utah and to the genus *Puccinellia* in Turkey and Iran.

Trends in plant collection in Australia were reviewed earlier by Malcolm (1971) who concluded that the needs of saline and arid areas had received little attention. Details were given of collections made in the Middle East, North Africa and the United States of America.

The original collection of 343 accessions made in 1966-67 has now been increased to 947 (as at December, 1983) and the aims of the project have been broadened. Some of the accessions received subsequent to the initial collections trip were listed in Technical Bulletins 6 and 8, and further collections in Technical Bulletin No. 21. This publication provides a comprehensive list of all accessions.

Appendix 1 lists the plants in the order in which they were collected. Detail as to origin, habitat and a description is supplied where available. Appendix 2 provides an alphabetical list of all genera and species, together with their accession numbers. Appendix 3 lists the plant collection according to country of origin.



Areas of the world from which seed samples have been obtained.

Overseas Accessions

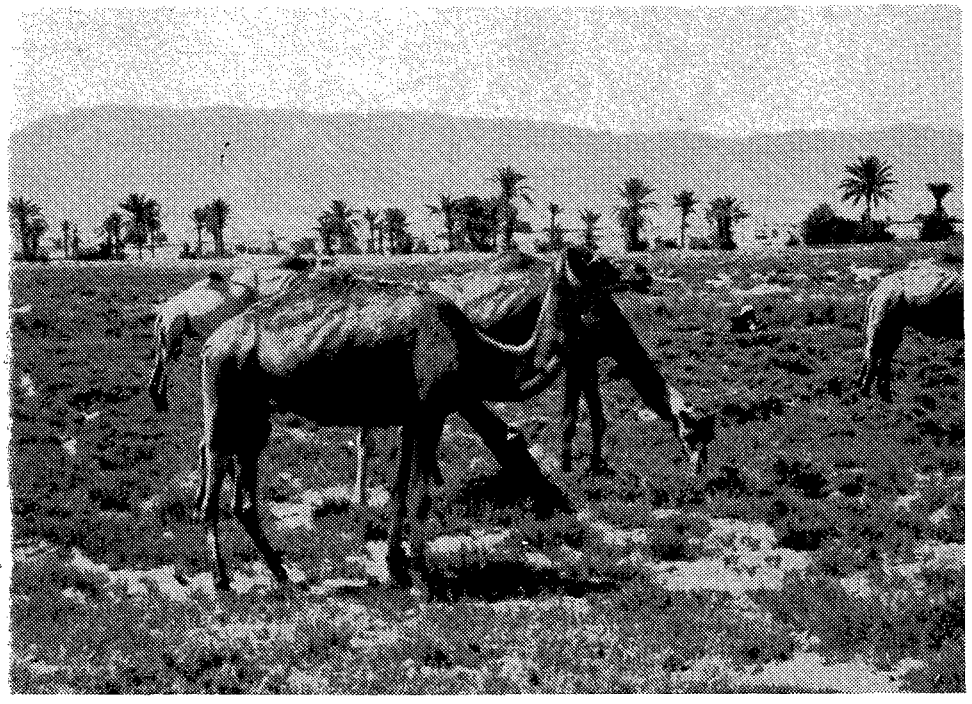
The original collection of *Puccinellia* species gave good coverage and has only been extended by the addition of a few samples from Dr A.H.J. Freijsen in Holland and from North America.

The original overseas shrub collection was less adequate because of problems in obtaining ripe seed due either to overgrazing or season. As a result of subsequent assistance from Drs H.N. Le Houérou and G. Novikoff, special collections of representative ecotypes of *Atriplex halimus* from Algeria and Tunisia have been incorporated into the test programme (Nos 386-389, 414-420) as well as other species (472, 618 and 619). Three interesting accessions of *A. polycarpa* (502-504) were the subject of salt and boron tolerance studies by Chatterton & McKell (1969) in the U.S.A. (California). *A. verrucifera* (616) is a particularly promising saltbush under natural conditions in Iran.

Appreciable assistance has been given by M. Forti of the Negev Research Institute, Israel, who provided samples of many shrubs in his test programme (349-383, 395, 396). These have included some South American species which have grown well in Western Australia, such as *Atriplex atacamensis* (363). Workers in South America have provided the very promising *A. undulata* (471) from Argentina and *A. repanda* and *A. coquimbana* from Chile.

Miscellaneous accessions of *Agropyron, Spartina, Elymus, Sporobolus* and other grass genera have been incorporated in the test programme in an effort to fill niches not suited to *Puccinellia* and *Paspalum vaginatum* or to improve on them.

A number of accessions from South Africa (540-551) were received via CSIRO, but do not appear to be markedly salt tolerant.



Camels grazing halophytic vegetation in Tunisia.

Australian Accessions

No comprehensive collection of Australian salt tolerant plants has yet been made. A.W. Humphries (personal communication) accumulated *Atriplex* and *Kochia* species from overseas and collected others in a trans-Australia expedition in 1950. The material was planted out by Humphries and D.G. Wilcox on the Merredin Research Station in 1951. Seed remaining from this work and other accessions of *Sclerolaena, Atriplex, Rhagodia* and *Maireana* were passed to the senior author in 1957 and planted at South Perth. From a total of 228 accessions, 31 produced plants and they included the following numbers of accessions — *Atriplex nummularia* (12), *A. muelleri* (3), *A. amnicola* (5), *A. vesicaria* (2) and *A. pseudocampanulata* (3). These accessions were replanted in a new nursery area for observation and multiplication. Seed and cuttings from the *A. amnicola* accessions, which grew very well, were planted into saline areas in the wheatbelt and are now represented by accession numbers 421 and 437.

A. amnicola, referred to by Humphries as 'swamp saltbush', but now known as 'river saltbush' has made outstanding growth in some trial plantings and occurs naturally in the catchments of the Gascoyne, Murchison and Greenough rivers and at Lake Moore. Its potential was recognised in the early 1960s, but plots sown with seed seldom produced results. The species is now known to grow readily from cuttings, to have low salt and high temperature requirements for germination and to have ecotypes which establish readily from seed in the field.

Wilcox and Malcolm (unpublished data) collected seed of salt and drought tolerant species in the Mt Magnet, Sandstone and Kalgoorlie areas in 1964. Accessions of *A. amnicola* incorporated in the present collection from this source are numbers 404 and 411. Accession 440 is from the only known natural occurrence. of *A. amnicola* in the cereal areas (near the town of Three Springs). Unfortunately the specific origins of samples 401, 402 and 405 are not known.

Areas in Western Australia where plant explorations were made.

In view of the performance of *A. amnicola,* a collection trip made in late 1972 by Malcolm to obtain a good coverage of the genetic material available in the before mentioned areas of occurrence. The plant occurs on flood plains in mixed stands with *A. bunburyana, A. vesicaria* and other halophilous plants. It is also common in the river beds and banks, frequently being associated with *Halosarcia* species. Seed or cuttings were collected from 33 stands of *A. amnicola* and from miscellaneous other plants. In all, a total of 56 accessions was obtained (558 to 614). Few of the cuttings survived even though they were refrigerated in the field immediately after collection.

Another Australian species which has been overlooked in the past is *A. paludosa*. A collection (464) was made south-east of Adelaide in 1970 and grew exceptionally well. Accessions of *A. vesicaria* collected on the Nullabor on the same trip (466, 468 and 469) also grew well. Further collections have been made of both species.

Interest in the problem of revegetating mine dumps in the Kalgoorlie area increased in the 1970s. A plant collection trip to this area and the Nullabor was made in late February and early March 1973. An interesting range of species was found to be colonising the mine dumps and their alluvial fans. Construction of the Eyre Highway across the Nullarbor plain had provided disturbed areas in which a profusion of *Atriplex* species were growing. There was clear evidence of inter-specific crossing between *A. bunburyana, A. vesicaria* and *A. nummularia.* A total of 74 accessions were collected (accessions 624 to 698) including 10 species of *Atriplex.* In October 1973, T.C. Swaan made collections between Kalgoorlie and Warburton.

Miscellaneous other accessions of *Atriplex, Maireana, Puccinellia, Sporobolus, Enchylaena* and *Lolium* have been collected in Western Australia to give a coverage of the local flora. Other officers in the Department of Agriculture provided samples from Carnarvon and the north of the State.

Australian species referred to previously as genus *Kochia* have now been placed in the genus *Maireana.*

An accession of interest, *Threlkeldia diffusa* (519), was first used by M. O'Donnell, a farmer near Katanning who grew and grazed it on saltland using seed collected on the south coast.

Testing programme

There has been wide testing of the various plants in the 275mm — 625mm rainfall areas (Malcolm, 1974 and 1979), and ecotype trials have been carried out comparing the various accessions of the most promising species.

These trials have shown the most promising shrubs for the cereal areas to be *Maireana brevifolia, Atriplex undulata, A. amnicola, A. paludosa,* and *A. bunburyana.* Shrubs with possible application for more specific situations are *A. cinerea and A. lentiformis* while others such as *A. vesicaria* and *A. nummularia* are still being tested.

The programme has led to the development of a specialised machine, the Mallen Niche Seeder, to provide better establishment of shrubs in the field, (Malcolm, Swaan and Ridings, 1980). It is hoped that this development will enable large scale plantings to be possible at low cost in farm situations.

Testing of various accessions and grazing experiments to determine the value of the most promising shrubs for stock grazing are continuing.

As the collection and testing programme has proceeded, it has become apparent that it has a wider application than the revegetation of saline areas for forage production. Some of the plants have been used for revegetation experiments on coastal dunes, road verges, batters and mine dumps. Interest has been shown in alkaloid (518) and oil nut (523) producing shrubs. Acessions 444, 451, 463, 488, 489, 520-527, 531-537 and 554 have been collected for special soil conservation purposes.

In the case of road verge revegetation problems there is an opportunity to re-introduce uncommon, but suitable endemic shrubs for flora conservation, aesthetic and utilitarian purposes. Accessions 538, 539 and 620-623 have been collected for this purpose. In particular, 620 is a rare species, as is 518 which is an alkaloid-rich plant.

The disease *Coniothyrium atriplicinum* has been found on the bracts of *Atriplex* species and hot water treatment has shown promise as a control measure for seed samples. The seeds enclosed in their bracts may be treated by immersing in water at 55°C for 40 minutes and then drying. The disease has been recorded in Australia, Tunisia and the U.S.A. (California), but has not shown strong pathogenicity in glasshouse tests (Napier, 1983).

Seed exchange

Seed samples for experimental use have been sent to over 30 countries and many samples have been received in exchange. Correspondents have indicated encouraging results with salt tolerant forage species in India, Iraq, Israel, Mexico, Pakistan, Saudi Arabia and Spain.

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Appendix 1

List of Accessions 1966 — 1983

Main abbreviations: Diameter — D; Height — H; Australian Capital Territory — A.C.T.; New South Wales — N.S.W.; South Australia — South Aust.; United States of America — U.S.A.; Western Australia — West. Aust.

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
1	*Atriplex canescens*	4-wing saltbush	U.S.A. California, Burns Canyon wash San Bernardino Forest 1300m	Sandy soil with boulders assoc. spp. *Chilopsis linearis, Isomeris arborea, Juniperus californica*	H—1m, D—1.6m good young regrowth. Narrow-leaved perennial saltbush excellent browse
2	*Isomeris arborea*		As 1	As 1	Many branched perennial shrubs of some browse value.
3	*Distichlis stricta*	Desert saltgrass	U.S.A. California Imperial Valley N Westmoreland 30m	Banks and bottom of drain in irrigated area. Salt evident on soil	Perennial stoloniferous grass. Erect flowering shoot to 0.25m
4	*Atriplex canescens?*	4-wing saltbush	U.S.A. California Between Daggett and Newberry. 600m	Valley floor, sandy soil somewhat crusted and apparently saline	H—1m, D—1.3m heavily seeding. Sample green
5	*Atriplex* sp.		U.S.A. California 1.6km SE Newberry 550m	Valley floor, fine recent alluvium, puffy saline spots. *Tamarix* sp. nearby indicates presence of watertable	H—0.6m. Very heavily seeding hummock-forming perennial
6	*Atriplex lentiformis*	Quail brush	*As 5*	*As 5*	*As 5*
7	*Sporobolus airoides*	Alkali sacaton	U.S.A. California Just NW Newberry 550m	Valley floor, base of rocky hills. Loamy soil with pebbles, probably saline	Perennial tussock grass forming large clumps with hollow centre. Inflorescence 0.6m foliage to 0.25m H

8	*Atriplex lentiformis*	Quail brush	U.S.A. Utah, Old Gould's Ranch SE Hurricane 1300m	Alluvial medium textured salt encrusted soil fed by some seepage	Max. H—1.2m. D—1.8m,
9	*Atriplex confertifolia*	Shadscale	As 8	Alluvial medium textured soil somewhat saline	Max. H—0.6m, D—1m, round leaved perennial, somewhat spiney on branch tips. Butt may get very large, grazing recovery good
10	*Atriplex canescens*	4-wing saltbush	U.S.A. Utah 3.2 km S Gould's Ranch on Antelope Rd, SE Hurricane 1300m	Alluvial slopes beside gully. Very dry. Grazing pressure high in past	Hard grazed bushes in years past, now recovering well
11	*Atriplex canescens*	4-wing saltbush	U.S.A. Arizona S Antelope 1300m	Gypseous limey eroded medium textured soil. Melts when wet. Also present is snakeweed, *Cholla* and *Ephedra* sp.	Old hard grazed bush recovering well. Also present are seedlings on eroded surface
12	*Atriplex confertifolia*	Shadscale	U.S.A. Arizona Tuweep Rd., 8km N Clayhole well 1300m	Broad level valley alluvium probably saline	Typical shadscale. See 9
13	*Atriplex canescens*	4-wing saltbush	U.S.A. Arizona Clayhole well, SE Hurricane on Tuweep Rd 1300m	Poorly structured claypan soils subject to very heavy grazing in past	Old bush subject to very heavy grazing in past now recovering well. Good seedling regeneration in area
14	*Atriplex confertifolia*	Shadscale	As 13	As 13	As 13
15	*Panicum obtusum*	Vine mesquite	U.S.A. Arizona Rock Crossing. Reservoir S St. George 1100m	Fine textured red soil. Alluvial bottomland with extra moisture	Broad-leaved, trailing palatable perennial grass, Probably not salt tolerant

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
16	*Atriplex canescens*	4-wing saltbush	As 15	As 15	Very healthy bushes shooting vigorously
17	*Atriplex lentiformis*	Quail brush	U.S.A. Utah 1km S St. George 1100m	Swampland adjacent to Virgin River. Alluvial soils mildly saline	H—2m, D—3m very large semi-recumbent, much branched
18	*Atriplex confertifolia*	Shadscale	U.S.A. Utah S Beryl 1000m	Extensive poorly drained flat poorly structured light grey sandy loam to sandy clay loam soil probably saline-alkali	Small bush grazed in past and recovering
19	*Sarcobatus vermiculatus*	Black greasewood	As 18	As 18	H—0.8m, D—1.2m. Similar shape to *Maireana brevifolia,* but less leafy and somewhat spinescent
20	*Atriplex canescens*	4-wing saltbush	U.S.A. Utah 4.8km ENE Beryl 1000m	Extensive slightly undulating flats	Heavily seeding bush in roadway seedlings in adjacent grass paddock
21	*Atriplex gardneri*	Gardner saltbush	U.S.A. Utah	Bare claypan with scattered hummocky bushes. Somewhat saline	Semi-prostrate to prostrate branches along ground with uprights to 0.25m, 0.6—1m D Perennial.
22	*Atriplex gardneri*	Gardner saltbush	U.S.A. Utah 14.4km S Emery, near Ivy Creek 1700m	Soil from Mancos shale grey rubbly medium to heavy texture saline, roadside. Rain 125-150mm	Recumbent, leafy, long-lived. Seed on accessible uprights
23	*Atriplex* spp *corrugata, gardneri canescens, confertifolia* hybrids mixed sample		As 22	As 22	Various. Some plants possessing morphological features of more than one species.
24	*Atriplex gardneri*	Gardner saltbush	As 22	As 22, but high dry site in gravel pit	As 22

25	*Sitanion hystrix*	Bottle brush squirrel tail	U.S.A. Utah 8km N Ephraim 1800m	*Sarcobatus* flats. Some shadscale, a few 4-wing, Russian wild rye and crested wheat-grass seeded and doing well	Short, perennial bunch grass. Useful as admixture with *Sarcobatus*
26	*Sarcobatus vermiculatus*	Black greasewood	As 25	As 25	As 19. Useful sheep browse if mixed with other feed
27	*Atriplex nuttallii*	Nuttall saltbush	U.S.A. New Mexico 9.6km W Laguna by main road 1900m	Alluvial soil probably high in exch. Na, fine textured puffy surface	Prostrate broad-leaved. Similar to *A. gardneri*
28	*Atriplex canescens* x *nuttallii*		As 27	As 27	Bush appears to be a hybrid. Other hybrids present
29	*Atriplex* hybrids		As 27	As 27	Miscellaneous sample of possible parents and crosses
30	*Atriplex canescens?*	4-wing saltbush	As 27	As 27	Low plant, very small leaves and fruit for *A. canescens*
31	*Atriplex nuttallii*	Nuttall saltbush	U.S.A. New Mexico 48km E Albuquerque Highway 66 1850m	Upland sandy loam, floodplain site. Exch. Na probably high	Typical
32	*Atriplex nuttallii*	Nuttall saltbush	U.S.A. New Mexico 4.8km W San Ysidro 1900m	Red claypan soil with salty puffs. About 0.75m topsoil gone and caught in bushes	Up to 1m D
33	*Allenrolfea occidentalis*	Pickle weed	As 32	As 32	Succulent leafless perennial similar to *Halosarcia* in stems and seedheads, but more open and erect
34	*Suaeda torreyana*		As 32	As 32	Succulent perennial branching dominantly from base. Similar to *Maireana*, but larger leaf and sparser smaller bush

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
35	*Atriplex obovata*		U.S.A. New Mexico 8.0km W San Ysidro 1900m	Flats around Rio Salado. Disturbed roadside medium textured mildly saline soil	Semi-prostrate, up to 0.45m H, large bracteoles akin to *A. bunburyana*
36	*Triglochin maritima*		U.S.A. New Mexico 4.8km W San Ysidro 1900m	Saline seepage by road with *Distichlis stricta.* Alkali sacaton on edges	Clump forming perennial reminiscent of a long leaved tall *Plantago*
37	*Atriplex nuttallii* ?	Nuttall saltbush	As 35	As 35	Like 35 but smaller ornate bracts. Perhaps hybrid
38	*Atriplex canescens*	4-wing saltbush	As 35	As 35	Rather small isolated plant. Perhaps hybrid
39	*Sarcobatus vermiculatus*	Black greasewood	As 35	As 35	Vigorous leafy and seeding heavily
40	*Sporobolus airoides*	Alkali sacaton	U.S.A. New Mexico 6.4km SE Willard	Light grey clay loam, somewhat crusted, on margin of saltlake. Moderately saline some plants more so	Seedlings tiny and numerous in the area
41	*Atriplex canescens*	4-wing saltbush	As 40	As 40	Typical, grazed seedlings plentiful in salt crusted area
42	*Eurotia lanata*	Winterfat	U.S.A. New Mexico 3.2km S Corona	Rolling grassland with some juniper. Gravelly soil	Low branching, erect stemmed grey leaved perennial. Excellent browse
43	*Atriplex canescens*	4-wing saltbush	U.S.A. New Mexico Railway reserve adjacent New Mexico State Col. Res. Stn. Artesia 1100m	Light brown, sandy loam to loam with pebbles	Large straggly spreading bush

44	*Atriplex canescens*	4-wing saltbush	U.S.A. New Mexico 6.4km W Alamogordo by highway 1400m	Fine loamy sand, puffy saline surface	Small bush characteristic of the area, with small fruits
45	*Sporobolus airoides*	Alkali sacaton	As 44	As 44	Normal
46	*Atriplex griffithsii*		U.S.A. New Mexico 19.2km SW Lordsburg	Alkali flats. Saline-alkali grey clay, at times waterlogged	Small, not very woody angle branching from base. Perennial 0.3-0.6m H. Seedlings establishing well
47	*Suaeda torreyana*		U.S.A. New Mexico 20.8km SW Lordsburg	As 46, but saltier and wetter	Normal
48	*Sporobolus airoides*	Alkali sacaton	As 47	As 47	Normal; seedlings plentiful
49	*Calliandria eriophylla*	Fairy dusters	U.S.A. Arizona 3.2km W Tucson 900m	Rainfall 275mm, 50% summer. Shallow rocky limey soil on caliche	Pinnate leafed leguminous perennial browse. Shy seeder 0.6m H. Branching from base
50	*Eurotia lanata*	Winterfat	U.S.A. Arizona Highway 180, N Springerville 2850m	Basaltic soil associated with blue gramma	Normal
51	*Eurotia lanata*	Winterfat	U.S.A. Arizona Highway 66 just E Twin Arrows Jctn. Forest Service Rd to Mormon Lake 2850m	Winona soil, calcareous gravelly loam	Normal
52	*Atriplex polycarpa*	Cow spinach	U.S.A. Arizona Highway 93, NW Picacho 500m	Sandy loam, apparently non-saline, alluvial 200-250mm rainfall 60% winter	Fine leaved straggly long lived. H—1m, D—1m

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
53	*Atriplex lentiformis*	Quail brush	U.S.A. Arizona 3.2km W Avondale,	Alluvial plains of Salt River 200-250mm rainfall	Large semi-recumbent bush similar growth habit to *A. amnicola*
54	*Suaeda torreyana*	Seepweed	As 53	As 53	Normal
55	*Allenrolfea occidentalis*	Pickleweed	As 53	As 53	Normal
56	*Sarcobatus vermiculatus*	Black greasewood	U.S.A. Arizona 8km W Buckeye, Highway 80 350m	Alluvial floodplain saline crust on soil 200-250mm rainfall	H—2m, D—3m. Rather spinescent on old wood
57	*Atriplex canescens* x *polycarpa*		U.S.A. Arizona 9.6km W Buckeye, Highway 80 350m	As 56, but little or no salinity	Variable morphology of leaves and seeds
58	*Atriplex canescens*	4-wing saltbush	As 57	As 57	Normal
59	*Hilaria rigida*	Big galleta grass	U.S.A. Arizona Mobile Rd, approx. 12.8km E Gila bend	Banks of dry creek bed *Larrea* nearby on plain 200-250mm rainfall	Tussock grass with some ability to produce stolons. Fair to moderate value for cattle. Up to 0.75m H
60	*Hilaria rigida*	Big galleta grass	As 59	As 59	Normal
61	*Muehlenbergia porteri*	Bush muehly	As 59	As 59	Very fine leaved bushy. Very palatable to cattle
62	*Atriplex linearis*?		U.S.A. Arizona 4.8km W Maricopa 375m	Sandy alluvial plains by railway and road	May be a hybrid with *A. polycarpa*
63	*Atriplex linearis*		As 62	As 62	Fairly upright, sparsely branching. Long thin leaves. 0.6m H

64	*Atriplex polycarpa* x *linearis*		As 62	As 62	Various plants apparently hybrids
65	*Atriplex linearis*		U.S.A. Arizona 1.6km W Maricopa 375m	Alluvial silt loam by roadside with some extra mosture. Surface sealed perhaps saline	Prolific branching from the base. Long leaved 0.6m H
66	*Atriplex linearis*		U.S.A. Arizona 4.8km N Maricopa, roadside S Gila River 375m	Alluvial slope, calcareous, saline ungrazed	Desirable growth habit. Prolific branching from base, fairly flexible leafy
67	*Atriplex polycarpa*	Cow spinach	As 66	As 66	Some branching from base, more at top, small-leaved rigid, fairly brittle. Good seedling regeneration
68	*Lycium* sp.		As 66	As 66	Low round D—0.37m rather spiny but leafier than West. Aust. *Lycium* sp.
69	*Atriplex polycarpa*	Cow Spinach	U.S.A. Arizona 6.4km N Maricopa near Gila River bottom 375m	Alluvial flats not very saline	Various
70	*Atriplex linearis*		U.S.A. Arizona 7.2km N Maricopa 375m	Alluvial flats, somewhat saline with *A. polycarpa* and *Lycium* sp.	Very desirable growth habit. Prolific flexible semi-recumbent branching from base
71	*Hilaria rigida*	Big galleta grass	U.S.A. Arizona 8.0km W Dateland 250m	Wash and ridge in sandy desert plain with *A. polycarpa*	Normal
72	*Atriplex polycarpa*	Cow Spinach	As 71	Sandy ridge in desert sand plain	Large old bush
73	*Atriplex linearis*		As 71	As 71	Normal

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
74	*Atriplex linearis*		As 71	As 71	Large heavily thickened fruits
75	*Hilaria rigida*	Big galleta grass	U.S.A. Arizona Highway 80 E Yuma 230m	Sandy undulating valley floor	Normal
76	*Atriplex canescens*?	4-wing saltbush	U.S.A. California 6.4km E Date City Sea level	Sandy desert plain with *Larrea* and saltbush hummocks	Large old plant on mound
77	*Atriplex canescens*	4-wing saltbush	As 76	Sandy desert with *Larrea* hummocks. Roadside depression	Desirable flexible semi-recumbent branches shooting from top
78	*Atriplex lentiformis*		As 76	As 77	Huge bush typical of many H—2m, D—3m
79	*Atriplex confertifolia*	Shadscale	U.S.A. California N Adelanto on Highway 395 1150m	Alluvial slopes with *Larrea* and rice grass. Sandy loam soils	Normal spinescent growth. Fairly large bush about 1m D
80	*Atriplex* sp.		U.S.A. California 1.2km S Los Banos 200m	Non-saline alluvial soils with *A. semibaccata*	Perhaps annual
81	*Isomeris arborea*	Burro fat	U.S.A. California Little Panoche creek 1.6km below dam 250m	Soil of Kettleman series, arid hills bearing annual grass and a few perennial shrubs. Loam and small rocks. Steep roadside	Long lived perennial shrub in caper family. Highly regarded
82	*Atriplex polycarpa*	Cow spinach	As 81	As 81	As 81

83	*Elymus triticoides*		U.S.A. California De Pavo's farm, Creek near road in SW Los Banos in Panoche Hills. 350m	Side of creek bed	0.5m H. Stoloniferous winter dormant
84	*Distichlis stricta*	Desert salt grass	As 83	As 83	Normal
85	*Atriplex polycarpa*	Cow spinach	U.S.A. California Panoche Hills Fish and Game Saltbush Plot 45km S Los Banos 900m	Kettleman series soil loam	Normal
86	*Atriplex canescens*	4-wing saltbush	U.S.A. California 1.6km E Palm Springs 60m	Windblown sand	Normal, fairly upright
87	*Atriplex canescens*	4-wing saltbush	U.S.A. California Indio on Palm Desert Rd 60m	As 86	Semi-recumbent
88	*Atriplex lentiformis*	Quail brush	U.S.A. California Just N junction Highways 99 and 60 at Indio 15m	Somewhat saline sandy valley bottom	Large spreading bushes
89	*Atriplex canescens*	4-wing saltbush	U.S.A. California 2.4km NE Junction Highways 99 and 60 near Indio 15m	As 88	The bushes in this stand have seeds that are in general 4-winged, but some are very indented and some have extended bracts like *A. linearis*. Morphology of the bushes is very variable. This bush was very long lived
90	*Atriplex canescens*	4-wing saltbush	As 89	As 89	Leafy and succulent distinct type

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
91	*Atriplex canescens*	4-wing saltbush	As 89	As 89	Fine leaved and stemmed spreading; fuzzy appearance
92	*Atriplex canescens*	4-wing saltbush	U.S.A. California E Indio 12m	Fine sandy alluvium salty crust watertable 0.3m or less	Young plant
93	*Atriplex polycarpa*	Cow spinach	As 92	As 92	As 92
94	*Suaeda fruticosa* var. *brevifolia*	Sueda	Algeria 5km S Boghari 640m	Roadside. Last part of Tellienne Atlas before Hautes Plateau 300-350mm rain. Gypseous	Very similar appearance to *Maireana brevifolia*. To 0.5m H. Camels and a few sheep grazing
95	*Atriplex glauca*	Guettafia	As 94	As 94	Broad somewhat dentate leaves max 0.5-0.6m. Hard grazed by camels and sheep
96	*Atriplex glauca*	Guettafia	Algeria El Mesrane 850m	Sandy rise in saline flats with *Atriplex halimus, Suaeda, Salsola*, etc.	As 95
97	*Traganum nudatum*	Dhamrane	As 96	As 96	Succulent shrub very hard grazed. Very palatable rather shy seeder
98	*Atriplex halimus*	Guettaf	Algeria 15km NE Bou Saada 470m	Windblown fine sand, watertable at 4-5m	Stemmy less palatable than leafy ecotype
99	*Atriplex glauca*	Guettafia	Algeria 19km S M'Sila 480m	Roadside in silty salty flats. Flats carry *Salsola tetrandra, Sarcocornia fruticosa* and *Halocnemum* sp.	Young plants in seed. Germinates readily when sown
100	*Puccinellia distans*		Algeria. Pasteur turn-off on Batna-Constantine road 800m	Moist area with *Atriplex halimus, Juncus, Cynodon* and *Agropyron elongatum*	Small plant, little present

101	*Atriplex glauca*	Guettafia	Algeria About 1.6km N of Accession No. 100 800m	Broad flats 400mm rain mildly saline. Cultivated. It is volunteering	Less palatable than *Atriplex halimus*
102	*Atriplex halimus* ?	Guettaf	Algeria 17km N Ain Yagout	Moist area	About 3cm-H. Very heavily grazed forming a mat
103	*Suaeda fruticosa*	Sueda	Algeria Lake on W road near turn to Rouget de Lisle on Batna-Constantine Rd 750m	Border of lake behind *Arthrocnemum macrostachyum*	Heavily grazed pure stand fringing lake. Poor grazing value
104	*Traganum nudatum*		Algeria 9km S Biskra 80m	Gypseous silty sand; wind erosion; deep watertable	
105	*Aeluropus littoralis*	Akrech	Algeria 11km S Biskra 80m	Saline marsh	Similar to *Sporobolus virginicus*. Low grazing value
106	*Atriplex halimus*	Guettaf	As 105		Stemmy small leaved variety. Good grazing value
107	*Digitaria nodosa*		Tunisia Ain Cherichia, 20km W Kairouan towards Haffouz	Collected by H.N. Le Houerou	Perennial grass drought resistant. May be of value for the arid pastoral areas in West. Aust. Winter growing very drought resistant. Not very frost resistant
108	*Sporobolus marginatus*		As 107	As 107	As 107, but more frost resistant
109	*Atriplex glauca*	Guettafia	Tunisia Al Hanya near Sousse	Nursery by H.N. Le Houerou	Establishes easily from seed
110	*Atriplex halimus*	Guettaf	Tunisia Forest Research Station	As 109	

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111	*Hedysarum carnosum*	Sulla ?	Tunisia	Collected by H.N. Le Houerou	Good salt tolerant legume, but much hard seed. Rather a bad spiny pod for wool
112	*Trifolium fragiferum*	Strawberry clover	Tunisia Bulla Reggia	As 111	Native to Tunisia. Fairly salt tolerant
113	*Salsola vermiculata*		Algeria El Outaya N Biskra	Clay soil. Grows in very salty soils a bit less salty and wet than *Arthrocnemum*	Somewhat grazed
114	*Atriplex mollis*		Algeria L'Oued Rhir, S Biskra	Grows on soils a little more saline than *Atriplex halimus*, limey and often sandy and gypseous, very little inundation	
115	*Anabasis oropediorum*		Algeria Biskra 600m	Small bush. Some salt. Grazed. Clay soils not inundated. A little more salt than *Suaeda fruticosa*	
116	*Atriplex glauca*	Guettafia	Tunisia Nursery at INRAT (ex Souss)	Nursery	Recumbent
117	*Salsola tetrandra*	Khamada	Tunisia 8km N Metbasseta 10m	Flood plain of Oued Alem. Fine textured after 0.1m, saline and alkali soil. watertable 3-4m	Low grazed bushes. Poor grazing value. Perhaps better than *Arthrocnemum* and *Sarcocornia*. Re-establishes well if conditions good. Also grows on clay dunes with *Atriplex glauca*
118	*Hedysarum carnosum*		Tunisia 1.6km S Metbasseta Soltan 20m	Clay dune with eucalypts. 300-340mm rainfall. (Perhaps good on morrel soils in West. Aust.)	Very small bushes. Grows well where watered. Salt tolerant
119	*Atriplex glauca*	Guettafia	Tunisia Near minor bed of Oued Boghal by road 10m	Flood plain well drained of Oued Boghal, complex Nebuana. Watertable about 3m	Good ecotype leafy well grazed

120	*Suaeda fruticosa* var. *brevifolia*		As 119	As 119	Somewhat protected in trees. This plant resembles *M. brevifolia* but is not as woody. Grazed a moderate amount.
121	*Aeluropus littoralis* var. *repens*		Tunisia 1km S Tazerka 1m	Saline alkali marsh high watertable. occasional seawater	Prostrate perennial runner grass. Not very productive but highly drought and salt tolerant
122	*Puccinellia distans* subsp. *eudistans*		Tunisia Oued Tine by road 8km S Chouiggi	Flat area receiving water from mountains, spreads, moderate salinity e.g. couch, sedge with *Salsola fruticosa* or *Suaeda fruticosa* and *Sphenopus divaricatus*. Grey fine textured soil fair surface organic matter accumulation	Similar to *P. ciliata* in young stage. Grazed, rather small
123	*Festuca elatior* var. *arundinacea*	Fetugue de Gromballia	Tunisia Just S Soliman	'Well' drained flood plain. Soil cracking exch. Na 28% 0-0.2m	Perennial winter growing
124	*Suaeda fruticosa* var. *longifolia*	Souida	Tunisia Thina 10km S Sfax 2m	Medium to fine textured soil on flood plain non saline surface 2000-4000 mS/m at depth water > 2m	Prostrate due to grazing, normally is erect. Somewhat similar to *Maireana brevifolia* in leaf shape, etc. Grazed a little by sheep and camels. *Salsola tetrandra* present
125	*Salsola* cf *tetrandra*		Tunisia 25km S Sfax near road 2m	Roadside bank in flood plains near ocean	Herbarium specimen
126	*Aristida plumosa*		Tunisia 4.8km N of La Skhira (Cekhira) N Gabes 3m	An association of *Rhantherium suaveolens* and *Stipa lagascae* incl. collection Nos. 126-130. Sandy loam 0-0.5m over calcareous broken crust. Rainfall 140mm near coast	Perennial, small tussock forming grass. Good grazing species
127	*Rhantherium suaveolens*		As 126	As 126	Perennial composite semi-shrub. Good grazing
128	*Aristida ciliata*		As 126	As 126	Perennial bunch grass. Also occurs N of Gafsa on low plateau. Is not restricted to water-courses, but grows over broad areas on piedmonts. Good grazing
129	*Cenchrus ciliaris*		As 126	As 126	Perennial tussock grass. Good grazing
130	*Eragrostis papposa*		As 126	As 126	Biennial grass, rather small. Good grazing

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131	*Halimione portulacoides* var. *appendiculata*		Tunisia 6.6km N Seftimi 15m	p128 Novikoff (1965) Profile S3 (Coupe de Seftimi p125 Novikoff)	Somewhat similar in appearance to *Atriplex vesicaria*
132	*Aeluropus littoralis* var. *repens*		As 131	As 131	Perennial rhizomatous grass. Grazed
133	*Oryzopsis coerulescens*		Tunisia 70km from Gafsa on Gabes Rd 100m	Rocky alluvium in rilled piedmont. By road	Perennial tussock grass up to 0.9m H not very leafy, coarse stems. Good species
134	*Pennisetum elatum*		As 133	As 133	Perennial tussock grass, dense; coarse foliage up to 0.6m H. Palatable when young usually restricted to dry river beds
135	*Hedysarum carnosum*		As 133	As 133	Deep rooted perennial legume. Very good species. Dug for nodules, no success apparently as very deep
136	*Puccinellia distans* subsp. *eudistans*		Tunisia Foussana N Kasserine	Sandy saline alluvium from Djebel Chambi	Normal for *P. distans*. Quite a useful proportion of forage available. Growing with *Agropyron elongatum, Suaeda fruticosa* and *Sarcocornia fruticosa Juncus* nearby
137	*Agropyron elongatum*	Tall wheat grass	As 136	More restricted in occurrence than *Puccinellia*, perhaps to moister areas. Avoids sandiest areas. Hard grazed	Minor species here
138	*Atriplex glauca*		Tunisia Kasserine plains 600m	Association of *Sylibum eburneum* and *Beta macrocarpa*. No salt to very little, pH 7.5-8.0 in surface. Silty loam waterlogged in winter, dry in summer	Usual. Volunteers often in irrigated cereals
139	*Aristida ciliata*		Tunisia Djebel Zebeus near Sidi Bou Zid by road Gafsa-Kairouan 400m	Sandy loam some rocks pH 7.5, 250mm rainfall. No watertable, no run-on	Perennial tussock grass. Very good species

140	*Cenchrus ciliaris*		As 139	As 139	Perennial tussock grass growing well. Very good species needs seed scarification
141	*Aristida ciliata*		Tunisia 10km S Metlaoui on Tozeur Rd 40m	Rocky sandstone slope with layers of gypsum, 80mm rainfall	Tussock grass growing well. Very palatable. Probably establishes from winter rainfall
142	*Hedysarum coronarium*	Sulla	Tunisia NW Ariana by road about 3km 100m	Gypseous clay with rocks	Annual here because of harsh conditions. Perhaps adapted to gypseous clay
143	*Puccinellia distans*		Tunisia N Sebala Ben Armar by road	Clay waterlogged in winter dry in summer a little salty 500mm rain. With *Spergularia, Plantago, Juncus, Agropyron elongatum.* Very recent Medgerda soils. Beach in Roman times	Small and hard grazed
144	*Puccinellia* sp.		Turkey NE Turgutlu by river 120m	Riverine alluvium on bank of river 500-700mm rain	Small similar to *P. distans.* Perennial. Very small collection. Associated spp *Tamarix, Hordeum maritimum, Cynodon dactylon, Lolium* sp.
145	*Puccinellia* sp.		Turkey Near Kargin by road by irrigation channel 140m	Poorly drained patch by roadside in scooped out area for road, 500-700mm rainfall	Some very large clumps up to at least 0.6m H
146	*Puccinellia* sp.		Turkey E Kargin by irrigation drain near river, 140m	Eroded silty clay loam, saline, rich in mica with *Agropyron elongatum, Phragmites communis, Juncus, Spergularia, Pholiurus*	Very good stands and range from standing water to edge of erosion. Grazed little at present
147	*Puccinellia* sp.		Turkey E Kendirlik 1km on flats by river 150m	Mildly saline riverine alluvium with *Juncus, Suaeda, Agropyron elongatum, Spergularia, Salsola.* Flooding at times	Large clumps in standing water, small grazed ones on bare areas
148	*Puccinellia* sp.		Turkey 3km E Kendirlik. River flats 150m	Cracking clay dry with wet patches water beneath almost non-saline. Associated *Cynodon dactylon, Hordeum maritimum, Juncus, Trifolium fragiferum*	

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149	*Puccinellia* sp.		Turkey 7km E Sahlihli by road 180m	Frequently flooded. Alluvium with *Tamarix, Cynodon dactylon, Juncus, Agropyron elongatum, Panicum,* salt crust on soil	Perennial. Some bushes nearby 1m H in *Juncus.* Grazed
150	*Puccinellia* sp.		Turkey 5km W Afyon by main road 1030m	Grey cracking clay mildly saline flats and roadside bank <500mm rain	Small hard grazed almost continuous sward
151	*Puccinellia* sp.		Turkey 6km N Afyon by Ankara road 1030m	Stony clay roadside borrow area	
152	*Puccinellia* sp.		Turkey Kovak Co-operative Eskesehir near main buildings 800m	Grey clay loam friable slightly salty	Good stand with *Hordeum maritimum, Medicago sativa* and *Lolium*
153	*Puccinellia* sp.		Turkey N shore Lake Apolyont W Bursa 40m	Grey clay slopes gently to lake. Grazed. Growing with *Cynodon dactylon, Hordeum maritimum, Trifolium resupinatum*	Small and grazed
154	*Puccinellia* sp.		Turkey Canal bank SW Bursa by road 40m	Clayey salty wet banks of canal with *Polypogon* and *Hordeum maritimum*	
155	*Puccinellia* sp.		Turkey SW Bursa, just E turn S to Balikesir near Kara	Swampy area by road with *Hordeum maritimum*	Normal. Perennial
156	*Puccinellia* sp.		Turkey 40km E Afyon by main Konya Rd 940m	Grey clay flat dry in summer mildly saline. With *Juncus, Agropyron elongatum, Plantago* 300-400mm rainfall. Severe winter	Short hard grazed. Quite an extensive sward on winter water-logged grey clay.

157	*Puccinellia* sp.		Turkey Afyon by main Konya Rd, 5km E of Cay 940m	Seepage mildly saline with *Festuca, Trifolium* and sugar beet	
158	*Puccinellia* sp.		Turkey 54km E Aksehir on Konya Rd 1030m	Sandy clay-loam winter wet, summer dry, rain 300-350mm, perhaps very mild salt. Associated with *Agropyron elongatum, Cynodon dactylon, Spergularia, Cyperus, Hordeum maritimum*	Very short and hard grazed. Good sward
159	*Puccinellia* sp.		Turkey 3km E Konya on Kayseri Rd 1025m	Sandy clay loam on banks of pool mildly saline with *Hordeum maritimum, Polygonum, Atriplex, Alhagi*	Rank bushes beside water smaller on bank top
160	*Puccinellia* sp.		Turkey Road junction near grain silo on Ankara-Konya Rd about 3km from Konya 1050m	Sandy clay loam salt encrusted by rd watertable 0.7-1.0m with *Agropyron elongatum, Plantago, Spergularia, Lotus corniculatus, Cynodon dactylon, Trifolium fragiferum*	Both hard grazed and from protected area. Very good sward
161	*Puccinellia* sp.		Turkey 10km from Jn With Ankara Rd on Aksaray Rd 1010m	Clay loam. Saline wet and dry. Good range *Sarcocornia, Arthrocnemum* and *Aeluropus* to *Hordeum maritimum, Juncus, Alopecurus* and *Astragalus*	Various from small almost annual to coarse perennial some in standing water. Important grazed species in this area
162	*Atriplex* sp.		As 161	Mainly on roadside bank	Annual or biennial broad leaves
163	*Puccinellia* sp.		Turkey 97km NE Ankara-Konya Rd on road to Aksaray 970km	Salty clay flats	
164	*Puccinellia* sp.		As 163	Dry non saline sandy loam some extra water	Strongly bulbous very robust root system. Grazed

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165	*Puccinellia* sp.		Turkey 39km E Sultanhani on Konya-Kayseri Rd 950m	Summer moist clay flats mildly saline	Normal. Grazed
166	*Puccinellia* sp.		Turkey 39km E Sultanhani on Konya-Kayseri Rd 950m	Moderate saline moist to dry clay flats	Small plants hard grazed. A significant pasture component some areas almost pure stand
167	*Puccinellia* sp.		Turkey 33km from Kayseri on Malatya Rd 1450m	Mildly saline dark grey clay flat. Cool summer moist	Small very open pannicle. Dominant species on the slightly moist flats
168	*Puccinellia* sp.		Turkey 23km E Pinarbasi on Malatya Rd 1600m	Moist valley with small stream. No salt	Dense bulbous tussock hard grazed. Major component of damp area pasture with perennial *Trifolium*
169	*Puccinellia* sp.		Turkey 64km E Pinarbasi on Malatya Rd 1860m	Marshy valley no salt with perennial stream with *Poa, Festuca, Trifolium*	Tall, strong based, little grazed. Important species here
170	*Puccinellia* sp.		Turkey 8km E Vican on Erzincan-Erzurum Rd. Also 17km E Vican in same seed bag 1380m	Bottom of dry drain near river by roadside heavy soil and slighly salty swamp near rail crossing	Hard grazed and short, odd shoots up to 0.45m H. Only small amount here
171	*Puccinellia* sp.		Turkey 3km E Koprukoy on Agri Rd 1610m	Small stony sandy clay loam to clay between railway and road appears non-saline. Associated *Agropyron, Artemesia, Medicago*	Hard grazed flat tussocks horizontal spikes remaining. Not an important species in this area

172	*Puccinellia* sp.		Turkey 34km from Karakurt on Kagizman Rd 1420m	Damp area with *Trifolium repens* at side of road. Sandy	Ungrazed but rather small. A very unimportant species at this site
173	*Puccinellia* sp.		Turkey 12km from Kagizman on road to Igdir 1200m	Small hillside seepage appears non-saline with *Juncus* and *Poa*	Somewhat grazed, common type. Not important here
174	*Puccinellia* sp.		Turkey 2km and 3km S Igdir 920m	Border of swampy patches in irrigated plain. Little if any salt, also on broad clay plain	Grazed and knocked about. Minor species in some patches but opposite is fairly extensive area. Further on extensive area of *Puccinellia* with *Aeluropus*, cut for hay.
175	*Bechmania eruciformis*		Turkey 3km S Igdir 920m	Broad clay plain forms good pasture with *Puccinellia* on dark grey friable clay	Valuable pasture with *Puccinellia* on mildly salty clay
176	*Puccinellia* sp.		Turkey 41km S Igdir on road to Agri 1560m	Moist fine textured valley with some salt	Tall coarse growing in wettest parts on organic clay. soft but surface cracked and friable
177	*Puccinellia* sp.		As 176	Drier fringes of swamp area. Also from gully and nearby dry slopes	Normal fine medium height. Pure stands and with perennial clover cut for hay. Very important in this valley
178	*Puccinellia* sp.		As 176	Wetter fringes of swamp	Blue grey leafage distinct and growing with 177 where the two exchange sites. Important species, pure stands
179	*Puccinellia* sp.		Turkey 6km W Dogubayazit 1760m	Relatively dry and non saline hillside seepages in red-brown sandy clay loam with *Agropyron elongatum, Plantago* and *Festuca*	Normal area ungrazed at present. Useful amounts here
180	*Puccinellia* sp.		Turkey 37km W Dogubayazit on road to Agri 2040m	Marshy clay patch by road, non-saline with *Agropyron, Poa* and *Trifolium*	Rather pale green. Not important species here

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181	*Puccinellia* sp.		Turkey 31km S Agri 1580m	Slightly saline seepage by road very steep almost cliff	Possibly same species as 176. Good growth but inaccessible and small area
182	*Puccinellia* sp.		Turkey 41km S Agri on road to Ercis 1560m	Salty seepage by road near cereals therefore protected from grazing at present	Normal. Small importance here
183	*Puccinellia* sp.		Turkey 70km from Ercis on road to Van 1780m	Clay flat quite dry winter wet	Fairly tall but somewhat grazed. Not important here
184	*Puccinellia* sp.		Turkey 11km W Van on road to Tatvan 1670m	Cracking grey sandy clay loam by roadside probably non-saline with *Lolium, Trifolium fragiferum, Phragmites, Lotus corniculatus, Hordeum maritimum.* Gets extra water from road and irrigation, but fairly dry in summer	Normal not grazed at present. Not important here. Also includes seed from near ferry berth at Van
185	*Puccinellia* sp.		Turkey Lake shore near village of Gevas S Van	Moist areas on shore of lake with *Lolium perenne, Trifolium fragiferum*	Normal some grazed. Not important here
186	*Puccinellia* sp.		Turkey 1km E Tatvan wet area by lake 1600m	Wet sandy and mildly salt area by sea with *Trifolium fragiferum* and *Agrostis*	Heads die back but base appears perennial. Not important here
187	*Puccinellia* sp.		Turkey 22km E Tatvan by lake Van 1600m	As 186	Not important here
188	*Puccinellia* sp.		Turkey 10km N Erzurum on Artvin road 1950m	Clay flats in bottom of Erzurum plain with *Trifolium fragiferum, Lotus corniculatus*	Extensive areas. Grazed. Normal type. Main grass species here
189	*Puccinellia distans*		Turkey Near Kayseri	Not known	Accession collected by Dr Bahattin Oztan

190	*Puccinellia* sp.		Turkey Near Ankara	Very saline soil	Isolated plant. Grows well on non-saline heavy soil at Institute giving dense growth. Selected by Dr Oztan as very good type
191	*Atriplex nummularia*	Old man saltbush	Israel Omer near Beersheva 360m	Loessel soils with profile development alkaline slightly saline	Very good shape hemispherical
192	*Trigonella arabica*		Israel Ofakim W Beersheva 200m	225mm rainfall. Non-developed loessel soil + some sand	Dry. Important natural legume here has been cut for hay. May cause bloat if grazed too heavily, very palatable
193	*Panicum turgidum*		Israel Rd Magen to Miftahim 80m	200mm rainfall. Sandy soil by roadside	Tussock forming rank coarse stemmed branching grass
194	*Pennisetum dichotomum*		Israel On road Beersheva-Revivim 12km from Beersheva 200m	Light brown deep sandy soil by roadside 125-150mm rainfall	Rhizomatous rank coarse stemmed perennial grass
195	*Aristida plumosa*		Israel 14km S Beersheva, on Revivim Rd 200m	As 194	Tussock grass, fine stemmed
196	*Aristida ciliata*		As 195	Light brown stabilised dune sand 125-150mm rainfall	Tussock grass, rank
197	*Aristida scoparia*		As 195	As 195	Rhizomatous tussocky grass, rank coarse stemmed
198	*Bassia prostrata*		Israel (ex U.S.S.R.) Negev Research Institute Nursery (NRIN) 280m	Nursery	
199	*Eurotia ceratoides*		As 198	As 198	
200	*Salsola rigida*		As 198	As 198	

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201	*Lotus creticus*		As 198	As 198	
202	*Tetrachne dregei*		As 198	As 198	
203	*Atriplex atacamensis*		As 198 (Chile)	Originally from University of Chile Agricultural Expt Stn. P.O. Box 22, Maipu, Chile	
204	*Tetragonia arbuscula*		As 198	As 198	
205	*Atriplex* sp.		As 198 (Argentina)	As 198	
206	*Atriplex quinnii*		As 198	As 198	
207	*Bassia eriophora*?		Israel 2km E Arad 650m	Rocky slope by road	Perennial shrub. Grazed
208	*Salsola vermiculata*		As 207	As 207	As 207
209	*Reaumuria hirtella*		Israel 6km E Arad 650m	As 207	As 207
210	*Zygophyllum dumosum*		Israel 14km E Arad	Rocky arid hills. Less than 100mm rainfall	Old woody shrub. Hard grazed
211	*Gymnocarpus* sp.		As 210	As 210	As 210
212	*Suaeda monoica*		Israel Zohar Jn of road from Arad to Dead Sea shore 390m	Sandy stony alluvium with salty watertable	2m tall woody shrub, leaves about 15mm long and succulent
213	*Zygophyllum* sp.		Israel Zohar-Ein Gedi Rd 10km from Zohar 390m	Rocky alluvium by road and lakeshore. Salty watertable.	Succulent prostrate shrub not very woody

214	*Suaeda fruticosa*		Israel Between Zohar and Ein Gedi 340m	Alluvial fan, in wash	Semi prostrate
215	*Pennisetum* ?		Israel Ein Gedi 340m	Roadside	Large *Pennisetum*-like grass
216	*Pennisetum* ?		Israel Ein Gedi 340m	Roadside	Fine perennial bunch grass
217	*Haloxylon articulatum*		Israel between Ein Gedi and Zohar S Massada −330m	Stoney alluvial slope dry no watertable	Succulent-woody shrub size and shape like *Halosarcia pergranulata*
218	*Aeluropus repens*		Israel 1km S Sedom −340m	Salty sandy wash	Rhizomatous grass. Same spot as collected by A. Mitchell
219	*Eragrostis bipinnata*		Israel Ne Ot Hakikar south end Dead Sea −340m	Small sand dune on somewhat saline wash	Coarse rhizomatous dune grass
220	*Oryzopsis miliacea*		Israel 15km W Sodom on Dimona Rd 250m	Dry wash by road	Tall stemmy
221	*Calligonum comosum*		Israel 20km W Sodom on Dimona Rd 300m	Mishor Yemin ancient sand deposits	Spreading woody shrub
222	*Atriplex leucoclada*		Iraq Abu Ghraib Research Station, Baghdad	Mildly saline alluvial soils. Fine texture	Small volunteers. Herbarium specimen
223	*Pennisetum divisum*		As 222	Irrigated nursery	Sparesely leaved perennial tussock grass. Herbarium specimen

No.	Botanical name	Common name	Locality and approx. altitude (metres)	Habitat	Description
224	*Hyparrhenia hirta*		As 222	As 223	Perennial tussock grass. Herbarium specimen
225	*Lasiurus hirsutus* ?		Iraq Mr Saadon Yusuf, Range Magt. Divn, Min. of Agric. Baghdad		Perennial tussock grass
226	*Dicanthium anulatum*		As 225	As 225	Perennial grass grows on Min. of Agric. Res. Farm with irrigation.
227	*Lolium rigidum*	Wimmera ryegrass	As 225	Used by Min. of Agric. on arid salty areas	Annual ryegrass
228	*Panicum antidotale*		As 225	Original source not known	
229	*Cenchrus* sp. ?		As 225	As 225	
230	*Polygonum* sp.		As 225		
231	*Bassia indica*		As 225	Min. of Agric. Research Farm at Abu Ghuraib	Tall annual *Bassia* grows wild on research farm readily grazed
232	*Atriplex tartarica*		Iraq Western Desert 630m	120mm rainfall area	Perennial palatable saltbush. Grazed and highly regarded by Min. of Agric.
233	*Aeluropus* sp.		Iraq Abu Ghraib 2km W Arid Zone Research Institute (A.Z.R.I.) 12m	100mm rainfall. Salty, by road, watertable shallow	Perennial runner grass
234	*Calligonum* sp.		Iraq 21km W A.Z.R.I. 25m	Gravelly sandy soils underlain by calcareous gypseous material. Roadside	Medium sized shrub, palatable semi-spreading habit
235	*Aristida plumosa*		As 234	As 234	Small perennial tussock grass

236	*Medicago* sp.		Iraq 35km W A.Z.R.I. 25m	Sandy loam plains slight wash very bare and arid	Burr only of annual medic
237	*Salsola baryosma*		Iraq 47km W A.Z.R.I. 25m	Road embankment loamy	Spreading small leaved succulent perennial (?) shrub
238	*Zygophyllum* sp.		Iraq Lake Habbaniyah W Baghdad 25m	Very gypseous loam slopes bare and eroded, but cover coming back amongst planted trees	Small succulent shrub
239	Unknown		Iraq 84km W Fulluja on Rutba Rd 25m	Wadi in gravelly sandy desert	Grazed shrub forming small sand hummock
240	Unknown		As 239	As 239	As 239
241	*Eragrostis bipinnata*		Iraq Baquba 50m	Weed in garden	Tall rhizomatous coarse grass. Had been cut and heaped 25km NE Baquba is a grazed stand
242	*Salsola incanescens*		Iraq		Herbarium specimen
243	*Aristida plumosa*		Iraq 5km N turnoff to Sadour 75m	Arid pebbly hills loamy soil rain perhaps 100-150mm	Perennial tussock grass small. Grazed
244	*Medicago* sp.		As 243	As 243	Annual burr only. Presumably very short growing season
245	Unknown		As 243	As 243	Small perennial shrub hard grazed
246	Unknown		As 243	As 243	As 245
247	*Cymbopogon* sp. ?		Iraq Hills N Sadour 75m	Arid pebbly slope very dry	Perennial tussock grass dense tussock. Appears very palatable

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248	*Hyparrhenia hirta* ?		Iraq 8km NE Sadour 75m	Crevices in rocks	tall perennial bunch grass
249	*Aeluropus* sp.		Iraq 10km S Mukta Diya (NE Baquba) 50m	Salty clay flat some water lying around	Perennial rhizomatous grass fine leaved and short. heavily grazed and very salt tolerant
250	*Gobelia* sp.	Karaf in Gilan, Biyan at Eshtahard	Iran Eshtahard near bridge 1400m	Salty sandy clay loam flats winter flooded, palatability low	Perennial leguminous shrub. Grazed a little
251	*Atriplex* sp.		As 250	as 250	Prostrate perennial shrub. Well grazed
252	*Aeluropus littoralis*		As 250	As 250	As usual. Grazed
253	*Puccinellia distans*		Iran Just S Kharud bridge N Bouin (S Ghasvin) and at Valetabad 1500m	Salty alluvium in broad valley some parts winter waterlogged. Rain 200-250mm	Perennial bunch grass. Regenerating in area planted to saltbush. Not much present here
254	*Aeluropus littoralis*		As 253	As 253	Perennial rhizomatous grass. Some extensive stands hard grazed
255	*Aeluropus repens*		Iran 140km NE Hamadan 1600-1700m	Moist salty area very heavily grazed near village	Perennial rhizomatous grass. Hard grazed
256	*Puccinellia* sp.		As 255	As 255	Perennial tussock grass. hard grazed

257	*Aeluropus littoralis*		Iran 50km E Hamadan 1800m	Grey clay flats salty non-cracking. Hamadan has 335mm rainfall	Perennial runner grass. Extensive and grazed
258	*Camphorosma* sp.		As 257	As 257	Semi-prostrate with erect seeding stems. Less palatable than *Atriplex*. Herbarium specimen
259	*Puccinellia* sp.		As 257	As 257	Extremely hard grazed tussock grass. Minor amounts present
260	*Cynodon dactylon*	Couch Grass	Iran Just W Jannettabad on Hamadan- Kermanshah Rd 1500m	Mildly saline cracking clay flats just W town. Rain round 350mm	Very coarse leaved grass, thick rhizomes useful species here
261	*Puccinellia* sp.		As 260	As 260	About 0.2-0.3m H where protected near verges. Important grass hard grazed away from protection
262	*Medicago* sp.		Iran Bistoon, E Kermanshah 1400m	Patches of soil on rocky cliff face	Annual medics several species mixed
263	*Puccinellia* sp.		Iran 18km from Kermanshah. Animal Husbandry Stn. on Sandandadj Rd 1322m	409mm rainfall. Depression in clay flat probably non-saline swamp nearby	Small. Hard grazed not much here
264	*Atriplex leucoclada*		Iran N Bookan about 20km 1400m	Alluvial flats grey mildly saline irrigated cereals in spring, dry now	Semi-prostrate small shrub. Grazed
265	*Salsola dendroides*		As 264	As 264	Shrub very like small *Maireana brevifolia*. Grazed

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
266	*Cynodon dactylon*	Couch grass	Iran Soltabpeh village just S Miandoab 1400m	Grey clay at base of hill near winter pool. Rain probably 300-350mm	Very coarse and apparently vigorous. Hard grazed
267	*Puccinellia* sp.		As 266	As 266 and extends well up dry slope	Small. Hard grazed
268	*Aeluropus sp.*		Iran 10km W Miandoab (S Mahabad) 1400m	Up bank in grey mildly saline clay flats. 350mm rain	Coarse grass both long and stubby seedheads. Perhaps two species
269	*Aeluropus* sp.		As 268	As 268 down bank	Fine grass, long seedheads
270	*Puccinellia* sp.		As 268	As 268	Normal
271	*Crypsis aculeata* ?		Iran 21km N Mahabad just W Mami village 1400m	Winter flooded grey cracking clay	Prostrate grass perhaps annual. Grazed by sheep
272	*Puccinellia* sp.		Iran Saral village NW Mahabad 1400m	Mildly saline, grey sandy loam to clay loam flat	Normal. Very hard grazed considerable area
273	*Puccinellia* sp.		Iran 16km from Mahabad on Rezaiyeh Rd 1400m	Salty grey clay flat up bank a little	Small. Very hard grazed
274	*Aeluropus* sp. (perhaps mixed) mainly *littoralis*		As 273	Salty grey clay flat	Normal. Grazed not as hard as *Puccinellia*
275	*Puccinellia* sp.		Iran 69km W Mahabad by Lake Rezaiyeh 1200m	Salty seepage on shore of lake with Juncus and Polypogon	Tall and fine in clumps of *Juncus* short and grazed outside.

276	Halimione verrucifera		Iran Rezaiyeh 24km N 1200m	Very salty grey clay flats	Dense stand, very hard grazed. Appears excellent browse plant
277	*Aeluropus littoralis*		Iran 24km N Rezaiyeh 1200m	Very salty clay flats	Normal. Grazed
278	*Puccinellia* sp.		As 276	As 276	Normal. some way out in flat. Dies back. Very useful here, grazed mainly by cattle in this area
279	*Salsola nitraria*		As 276	Small non-salty ridge in saline flat	Small shrub, succulent. Grazed less by cattle than *Artemesia* and *Atriplex*
280	*Aellenia glauca*		As 276	As 276	Small succulent shrub stemmy, long sparse leaves
281	*Puccinellia* sp.		Iran 76km N Rezaiyeh 1400m	Extensive grey sandy loam to clay loam flat, probably *Puccinellia* cut for hay nearby. Rather fresh	Small
282	*Puccinellia* sp.		Iran 26km N Shahpour N Rezaiyeh 1400m	Clay loam grey salty flats, very salty springs near bare hill	Normal. Useful here mixed with *Halimione verrucifera*
283	*Aeluropus littoralis*		As 282	As 282 more limited range here than *Puccinellia*. *Aeluropus*, mainly in moist gullies in flat	Normal, Limited importance here
284	*Puccinellia* sp.		Iran 6km E Khoy 1140m	Mildly saline flat cut for hay. Doing well where mowed, cultivated and grazed	Major constituent of hay and on grazed airport opposite
285	*Plantago* sp.		As 284	As 284	*Puccinellia* but less important on mowed area. Good on cultivated area
286	*Aellenia glauca* ?		Iran 40km SE Khoy on Tabriz Rd 1140m	Dry seepage, red sandy clay loam soil	Sparse long leaves
287	*Salsola crassa*		As 286	As 286	Small bush perennial

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288	*Aeluropus littoralis*		As 286	Very dry for *Aeluropus*. About 300mm of rain	Rather poor very little here
289	*Atriplex leucoclada* ?		Iran 50km SE Khoy on Tabriz rd 1200m	Very extensive red sandy clay loam, salty valley watertable in centre	Semi-prostrate, seedlings abundant. Useful for grazing. Also present is *Halimione verrucifera* which appears to be a very important species
290	*Salsola crassa*		As 289	As 289	As 289
291	*Suaeda* sp.		As 289	As 289	Medium sized shrub fine succulent leaves. Grazed
292	*Puccinellia* sp.		Iran 22km E Marand on Tabriz Rd 1500m	Roadside drain	Large tussocks. Grazed well, but very little present
293	*Puccinellia* sp.		Iran 27km W Tabriz on Marand Rd 1400m	Grey clay salty flats, dry in summer	Small plants. Main or only grass over large areas with *Halimione verrucifera*
294	*Atriplex* sp.		Iran 24km W Tabriz on Marand Rd 1400m	Non saline alluvial slopes some irrigated	Prostrate, strong taproot up to 25mm D at least. Grazed
295	*Aeluropus* sp.		Iran 13km NE Tabriz on Ahar Rd 1500m	Dry fringes of salty seepage	Normal. Less present than of *Puccinellia*
296	*Puccinellia* sp.		As 295	Saline seepage, occurs from permanent water through salt crusted area to nearly dry area	Big tussocks in water, smaller when dry. Most important plant on the seepage
297	*Aeluropus* sp.		Iran 22km NE Tabriz on Ahar Rd 1500m	Non to mildly saline slope some extra winter water from run on. Very dry in summer, soil sandy	Very little here
298	*Atriplex* sp.		As 297	As 297	Prostrate perennial. Grazed

299	*Salsola* sp.		As 297	As 297	Small perennial shrub with long leaves. Grazed
300	*Puccinellia* sp.		As 297	Very dry site for *Puccinellia* also probably completely non-saline and sandy	Important grass on areas receiving some extra water
301	*Salsola* sp.		As 297	As 297	Medium sized perennial shrub, small leaves
302	*Salsola rigida*		As 297	As 297	Medium sized shrub branching profusely from hard grazed base and flowering very heavily. Appears to be excellent shrub and very hard grazed
303	*Puccinellia* sp.		Iran 24km NE Tabriz 1500m	Non salty winter irrigated area with *Aeluropus*	Tall growth. Important here
304	*Atriplex hastata*		Iran 38km NE Tabriz on Ahar Rd 1400m	Roadside bank	Prostrate ? annual
305	*Aeluropus littoralis*		As 304	Mildly saline alluvium at base of bare salty hills	Normal. Not much here
306	*Puccinellia* sp.		As 304	As 304	Normal. Not much here
307	*Aellenia auricula* var. *auricula*		As 304	Salty eroded clay loam hills very bare	Broad succulent leaved perennial shrub. Probably grazed
308	*Salsola* cf *tomentosa*		As 304	As 307	Small leaved succulent small perennial shrub. Grazed
309	*Eurotia ceratoides*		As 304	As 307	Similar to *Eurotia lanata.* Grazed
310	*Salsola* cf *crassa*		As 304	Mildly salty winter wet flats of red sandy loam	Small long leaved succulent shrub ? annual
311	*Puccinellia* sp.		Iran 53km NE Tabriz on Ahar Rd 1400m	Mildly salty river flat sandy loam to sandy clay loam with *Suaeda, Atriplex* and *Halocnemum*	Normal. Useful amounts here

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312	*Halimione verrucifera*		As 311	As 311	Flat hard grazed base with erect flowering stems. Very important species but not so much here
313	*Sporobolus* sp.		Iran 63km NE Tabriz 1400m	Edge of salt flat in sandy loam soil mildly salty	Tall perennial grass broad-leaved
314	*Aeluropus* sp.		As 313	As 313 and into salt a little more	Normal. Associated with *Salsola* and *Atriplex*
315	*Lotus corniculatus*		Iran 93km NE Tabriz on Ahar Rd 1300m	Mildly salty pasture flat. White salt on soil	
316	*Puccinellia* sp.		As 315	As 315	Forming pasture with *Lotus corniculatus* and little *Phragmites*. Valuable species here
317	*Cynodon dactylon*	Couch grass	Iran 31km E Meshginshah on Ardebil Rd	Salty seepages and dry areas nearby	Very vigorous coarse growth like kikuyu grass. Hard grazed perhaps salt tolerant, was crusted with salt
318	*Puccinellia* sp.		As 317	Salty seepage	Normal. Small area only. Grazed
319	*Puccinellia* sp.		Iran 66km E Meshginshah just W Ardebil 1263m	Non saline pastures in plains sandy loam to loam soil	Small. Minor importance in pasture here. Associated *Trifolium fragiferum*, *Lotus corniculatus* and *Hordeum* sp.
320	*Puccinellia* sp.		Iran Sara'in village near Mt Sabalan 28km from Ardebil 1400m	Warm spring very wet and boggy	Small. Not important here
321	*Puccinellia* sp.		Iran 13km from Ardebil on Astara Rd 1260m	Extensive mildly salty flats	Hard grazed, very good area with *Atriplex*

322	*Camphorosma perenne*		Iran 15km S Qasvin	Mildly saline sandy loam flats	Low based perennial shrub with erect flowering shoots, fine leaved. Valuable browse plant, less palatable than *Puccinellia* and *Halimione verrucifera*
323	*Atriplex leucoclada*		Iran 22km S Teheran on Qum Rd 1150m	Non-saline roadside near irrigated lucerne round 150mm rainfall	Prostrate shrub perennial. Grazed
324	*Astragalus* sp.		Iran 59km S Teheran on Qum Rd 1100m	Mildly saline sandy loam alluvium beside rill, round 100mm rainfall temperatures down to −50°C	Very strongly rooted perennial. Heavily grazed, seeding well
325	*Aeluropus repens*		As 324	As 324	Normal, collecting blown sand
326	*Aellenia sub-aphylla*		Iran 60km S Teheran on Qum Rd 1100m	Bank of gully in mildly salty alluvial flat	Sparse leaved stemmy perennial shrub. Grazed
327	*Bassia* sp.		Iran 109km S Teheran on Qum Rd 950m	Alluvial slopes in valley of Qum Lake. Roadside	Small annual ?
328	*Aeluropus repens*		Iran 125km S Teheran on Qum Rd 800m	Very salty moist areas beside river	Normal
329	Unknown		Iran 170km from Teheran down Qum Rd 900m	Rocky hill slope	Coarse tussock almost rhizomatous grass. *Aristida plumosa* present. Grazed
330	*Atriplex hortensis* ?		Iran 160km N Esfahan near 160km roadsign 1200m	Stony salty hill slopes	Very like *Atriplex confertifolia* of U.S.A.
331	*Salsola lanata* ?		As 330	Salty flat with *Halimione verrucifera*	Small succulent

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332	*Salsola malcolmii*		As 330	Salty stony hills	Small succulent perennial shrub compact base, erect flowering stem
333	*Salsola rigida*		As 330	As 332	Small perennial shrub, grazed
334	*Salsola* sp.		As 330	As 332	As 333
335	*Aeluropus littoralis*		As 330	Salty flat	Mainly in small depressions in *Halimione verrucifera* stand. Main grass in saltbush area
336	*Puccinellia* sp.		As 330	As 335, mainly with *Aeluropus*	Tops very dry and brittle. Not much present
337	*Eurotia ceratoides*		As 330	Salty stony hills	Small perennial shrub erect stemmed
338	*Aeluropus repens*		Iran 15km S Esfahan. Marge Lashutur 1500m	Salty flat sandy loam soil watertable about 10m	Normal. Very large area hard grazed
339	*Aeluropus littoralis*		Iran Feyzabad S Esfahan 1400m	Mildly saline sandy loam to loam flat	Normal
340	*Salsola turcomanica*		Iran 41km E Esfahan on Na'in Rd 1400m	Saline flat in roadside excavation sandy loam and sandy clay loam soil. Watertable 1-2m	Fairly hairy. Not very palatable. Eaten by camels
341	*Aeluropus littoralis*	Shuremargh (salty grass) or Shirinmargh (sweet grass) appear same species	Iran salty plain at Segzi E Esfahan 1400m	Salty cracking clay flats very large area water lies some winters up to 1 month. Rain 100-200mm	Important pasture grazed mainly by sheep and goats
342	*Aellenia sub-aphylla*		Iran 173km S Saveh 1200m	Non saline slopes and roadside in arid hills. rain 120mm. Also roadsides on broad alluvial rather sandy soil slopes	Almost leafless fairly succulent stemmed medium sized spreading perennial

343	*Salsola* sp.		Iran 158km N Esfahan	Salty stony hills	Small leaved, perennial shrub. Succulent
344	*Atriplex bunburyana**	Silver saltbush	Australia West. Aust. 6.4km S Cleary 400m	Roadside	
345	*Puccinellia stricta* ?		Australia West. Aust. Near Hopetoun Near sea level	Edge salt flat	About 0.25m H unexpanded inflorescences rather rigid
346	*Sporobolus airoides*	Alkali sacaton	U.S.A. New Mexico		
347	*Sporobolus airoides*	Alkali sacaton	As 346		
348	*Atriplex canescens*	4-wing saltbush	As 346		
349	*Tetragonia arbuscula*		Israel Negev Res. Inst. Beersheva	Original source unknown	
350	*Zygophyllum dumosum*		Israel Beersheva 20km S	Hills near Beersheva	
351	*Atriplex breweri*		Israel Omer — trial area	Collected at Ilanot-foreign source unknown	
352	*Atriplex leucoclada* var. *turcomanica*		As 349		Valves 3-lobed . . . lateral lobes 3-5 toothed
353	*Atriplex* sp.	Hierba azul	As 349 (Venezuela)	Grows in vicinity of seashore	Annual
354	*Atriplex rosea*		As 349		
355	*Suaeda fruticosa*		As 349	saline marshes in Negev	

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
356	*Anabasis haussknechtil*		As 349	Steppes — heavy alluvial loessial soils	
357	*Tetrachne dregei*		As 351	Original seed from South Africa	
358	*Atriplex quinii*		As 352 Original from Canberra A.C.T.		
359	*Atriplex nummularia*	Old man saltbush	As 351		
360	*Atriplex lentiformis*	Quail brush	As 352 Original from California		
361	*Atriplex* sp.		As 352 Original from Argentina		
362	*Atriplex canescens*	4-wing saltbush	As 351		
363	*Atriplex atacamensis*		As 352 Original from Chile		
364	*Bassia indica*		As 349		Annual — good germination; vigorous growth in average winters
365	*Suaeda monoica*		As 349	Wet salines	
366	*Anabasis articulata*		As 349	Stony gravelly areas and sand	
367	*Aellenia autrani*		As 349	Loessial plain	Annual
368	*Eurotia ceratoides*		As 349 Seeds from U.S.S.R.		
369	*Atriplex polycarpa*	Cow spinach	As 349		

370	*Atriplex leucoclada*		As 359		
371	*Oryzopsis miliacea*		As 352		
372	*Sporobolus airoides*		As 349		Perennial bunch grass largely summer growing
373	*Haloxylon articulatum*		Israel Yeruham	Alluvial loessial plain	
374	*Lotus creticus*		As 352 Seed from Tunisia		
375	*Atriplex canescens* subsp. *linearis*	4-wing saltbush	As 352		
376	*Calligonum comosum*		as 349	Sandy soil	
377	*Atriplex halimus*		Israel Negev Inst. for Arid Zone Res. Seed No. 4616		
378	*Bassia prostrata*		As 349		
379	Suaeda vera		Israel Ein Mur, 45 km S Beersheva		
380	*Atriplex halimus*		As 359		
381	*Lotus lanuginosis*		As 349		
382	*Dorycnium hirsutum*		As 352		

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
383	*Schanginia baccata*		As 349	Saline soils — marshes	Annual
384	*Anabasis oropediorum*		Algeria Tadmit		
385	*Anabasis oropediorum*		Algeria Laghouat Ouedgedi 60km W	150mm rainfall	
386	*Atriplex halimus*		Algeria Zahrez chergui		
387	*Atriplex halimus*		Tunisia INRAT		
389	*Atriplex halimus*		Algeria Boghari		
390	*Salsola vermiculata* var. *villosa*		As 384		
391	*Puccinellia ciliata* cv. Menemen		Australia West. Aust. D. Ranger Buntine	Saltland experiment, edge of salt flat	Hard grazed
392	*Trigonella ornithopodioides*		Australia West. Aust. Narrogin		
393	*Atriplex hymenotheca*		Australia West. Aust. Just W Damboring	Sandy banks in salt channel country	
394	*Atriplex* sp.		Australia West. Aust. Railway embankment just N Damboring	Embankment in salt channel country	

395	*Salsola rigida*		As 352 Mother plants from Tashkent, U.S.S.R.		
396	*Salsola vermiculata*		As 352	Calcareous stony steppes on slight saline soils	
397	*Puccinellia ciliata*		Australia West. Aust. J. Stokes Cunderdin		Grazed young
398	*Puccinellia ciliata*		Australia West. Aust. Wongan Hills Res. Stn.		
399	*Festuca rubra*		United Kingdom		
400	*Panicum coloratum*		South Africa Kubulabula		
401	*Atriplex amnicola*	River saltbush	Australia West Aust.		
402	*Atriplex amnicola*	River saltbush	As 401		
403	*Swainsona occidentalis*		Australia West. Aust. S Meekatharra		
404	*Atriplex amnicola*	River saltbush	Australia West. Aust. Edah Station		Heavily grazed — spreading
405	*Atriplex amnicola*	River saltbush			
406	*Maireana tomentosa*		Australia West. Aust. Lake Austin, NW side		

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
407	*Atriplex acutibractea* subsp. *karoniensis*		Australia West. Aust. Glengarry mine on Edjudina Station, NE Kalgoorlie		
408	*Atriplex halimus*		Israel		
409	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust.		
410	*Maireana pyramidata*	Black bluebush	Australia West. Aust. Daydawn, 0.8 km E	Whitestone/Greenstone Gabanintha Land System	
411	*Atriplex amnicola*	River saltbush	As 404		
412	*Puccinellia ciliata* cv. Menemen		Australia West. Aust. I Sounness Kendenup		
413	*Sporobolus airoides*	Alkali sacaton	U.S.A. New Mexico Rio Puerco		
414	*Atriplex halimus*		Tunisia Sidi Bou Zid 200m		
415	*Atriplex halimus*		Tunisia Habjeb el Aioun Route Sbeitla Kairouan 350m		

416	*Atriplex halimus*		Tunisia Route:— Sbeitla-Kairouan between Habjeb el Aioun and Sbeitla 400m		
417	*Atriplex halimus*		Tunisia Oum el Adam. Sidi Bou Zid/Sbeitla 300m		
418	*Atriplex halimus*		Tunisia Haffouz. Road Kairouan/Maktar 300m	Sandy gypseous	
419	*Atriplex halimus*		Tunisia Rahia. Road Sbeitla/Maktar 550m	Silty clay	
420	*Atriplex halimus*		Tunisia Kasserine 650m	Silty clay	
421	*Atriplex amnicola*	River saltbush	Australia West. Aust. L.W. Kahl, Kununoppin and J. Trott Corrigin 300m	Salt affected morrel soils	1.3m H; 2-2.7m D
422	*Atriplex suberecta*		Australia West. Aust. Marchagee, Ex. CSIRO		
423	*Sporobolus virginicus*	Salt water couch	Australia West. Aust. J. Trott, Corrigin 300m	Rather dry salt seepage in light land	Rhizomatous
424	*Puccinellia ciliata* cv. Menemen		As 423	Salt flat	

No.	Botanical name	Common name	Locality and approx. altitude (metres)	Habitat	Description
425	*Puccinellia ciliata* cv. Menemen		As 423	As 424	Lanky spreading plants with many inflorescences
426	*Puccinellia ciliata* cv. Menemen		Australia West. Aust. J. Starcevich, Bruce Rock 300m	Salt flat old trial area	
427	*Puccinellia ciliata* cv. Menemen		Australia West. Aust. B. Clemens, Dangin 330m	Salt flat old trial area	
428	*Sporobolus virginicus*	Sand couch	Australia West. Aust. Avon River, York 200m	Bed of Avon River	
429	*Maireana brevifolia*	Bluebush	Australia West. Aust. B. Parker, Jilakin E Kulin 300m	Morrel soils	White flowered erect growing
430	*Maireana brevifolia*	Bluebush	As 429	Morrel soil	Pink flowered spreading growth 3m—D
431	*Maireana brevifolia*	Bluebush	Australia West. Aust. 12.7km S Ardath on Corrigin Road 350m	Non-saline roadside	Straggly, pale flowered
432	*Atriplex semibaccata*	Creeping saltbush	Ex Morocco	Ex CSIRO No. 36218 CPI	
433	*Atriplex semibaccata*	Creeping saltbush	Chilean commercial	Ex CSIRO No. 36219 CPI	
434	*Atriplex bunburyana*	Silver saltbush	As 429	clay flats saline roadside	Erect, heavily utilised in paddock

435	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. 1.3km N of Ardath on Bruce Bock Road 350m	Dense stand with gimlet *(Eucalyptus salubris)* near hill top	
436	*Enchylaena tomentosa*	Ruby saltbush	Australia West. Aust. 12.7km S of Ardath on Corrigin Road 350m	Non-saline medium textured soil with bluebush	Semi-recumbent
437	*Atriplex amnicola*	River saltbush	Australia West. Aust. Wongan Hills Research Station	Salt land paddock	Planted from cuttings from material originally in Inst. of Agric. collection. Detailed origin of this specific accession lost
438	*Atriplex leptocarpa*		Australia West. Aust. R. Forsyth & Co., Kellerberrin 300m	Salt affected land adjoining salt lakes	Spreading and seeding well. *Maireana brevifolia, Atriplex spongiosa* and *Mesembryanthemum nodiflorum* present
439	*Atriplex nummularia*	Old man Saltbush	Australia West. Aust. J.K. & E. Wallis, Dalwallinu, Department of Agriculture Demo plot using commercial seed. 300m	Banks around saline closed depression	Vigorous
440	*Atriplex amnicola*	River saltbush	Australia West. Aust. Just S Three Springs on E side of road over lakes	Mildly saline flats grassed and carrying some York gum *(Eucalyptus loxophleba)*	Layering naturally, male more strongly layered than female
441	*Atriplex nummularia*	Old man saltbush	Australia West. Aust. Yaringa Station, 5km N of homestead on NW Coastal Highway	Limestone ridges near ocean, skeletal soil	Very tall and robust upright broad-leaved. Very old bushes. Natural occurrence

No.	Botanical name	Common name	Locality and approx. altitude (metres)	Habitat	Description
442	*Maireana brevifolia*	Bluebush	Australia West. Aust. 16km SSW Buntine and 19.6km W Wubin 300m		Large old bush
443	*Maireana polypterygia* ?		Australia West. Aust. Brickhouse Station, 56km S Carnarvon on NW Coastal Highway	Clay flats between low parallel sand hills which carry low open *Acacia* scrub	Dense stand of specimen occasional saltbush and *Enchylaena tomentosa*. Some annual saltbush
444	*Galenia pubescens*		Australia West. Aust. Original from Soil Cons. Auth. Vict. This sample J. Trott, Corrigin. 400m	Sandplain soils near seepage area	Prostrate perennial succulent
445	*Puccinelia airoides*		U.S.A. Montana Bridger		Perennial tussock grass
446	*Puccinellia stricta*	Marsh grass	Australia West. Aust. Paper Collar Gully Borden 200m	Salty slopes beside eroded creek	Rigid rattail like seedheads up to about 0.3m long. Perennial tussock grass
447	*Puccinellia ciliata* cv. Menemen		As 446	As 446	Plants in spread from sown area seed from commercial Menemen.
448	*Rhagodia baccata*		As 401		Perennial shrub
449	*Scaevola spinescens*		Australia West. Aust. Carnarvon Gascoyne Research Station 20m		Perennial shrub

450	*Atriplex paludosa*	Marsh saltbush	Australia West. Aust. Eagle Bay, W Busselton	Rock crevices 50-100m from beach	Flourishing bush 1.3m H, perennial
451	*Jacksonia sericia*		Australia West. Aust. Ex. Kings Park & Botanic Garden from coastal plain near Perth	Sand	Prostrate shrub
452	*Trigonella ornithopodioides*		Australia West Aust. Ex. Narrogin District Office nursery plot	Matured in Soils Division Nursery	Annual legume
453	*Lolium rigidum*	Wimmera Ryegrass, Merredin early strain	As 401		Commercial seed
454	*Lolium rigidum*	Ryegrass	Australia West. Aust. Toolibin	Salt land plot	
455	*Lolium rigidum*	Ryegrass	As 454		
456	*Lolium rigidum*	Ryegrass	Australia West. Aust. Just E Woogenilup	Seepage, salty	
457	*Lolium rigidum*	Ryegrass	Australia West. Aust. D.G. Weir, Ongerup	Salty	
458	*Lolium rigidum*	Ryegrass	Australia West. Aust. Honey, Noggerup	Salty flat	
459	*Lolium rigidum*	Ryegrass	Australia West. Aust. K. Summers Stirling Estate	Salty flats	

No.	Botanical name	Common name	Locality and approx. altitude (metres)	Habitat	Description
460	*Lolium rigidum*	Ryegrass	Australia West. Aust. Heinrich, NE Carnamah	Saline flats	
461	*Lolium rigidum*	Ryegrass	Australia West. Aust. Stokes, Yuna	Salt flat	
462	*Maireana brevifolia*	Bluebush	Australia West. Aust. 1.7km W Ravensthorpe	Non-saline roadside	Pink flowered. Perennial shrub
463	*Nitraria billardieri*	Nitre bush	Australia West. Aust. Eucla old telegraph station area. Sea level	Coastal sand drift and salty ? flats	Very large perennial bushes on mounds
464	*Atriplex paludosa*	Marsh saltbush	Australia South Aust. N Policeman's Point 64km N Kingston SE Near sea level	Flats by salt lake	Vigorous perennial saltbush
465	*Atriplex paludosa*	Marsh saltbush	Australia South Aust. 56km N Kingston SE	Roadside	Perennial saltbush
466	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. Cocklebiddy 100m	Roadside bank. bushes regenerating	Perennial shrub
467	*Atriplex nummularia*	Old man saltbush	Australia West. Aust. Madura on Eyre Highway 92km E 15m		Perennial shrub

468	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. 42km E Madura 15m	Limey grey brown soil with shells (bivalves) amongst large mallee	Small and straggly perennial shrub
469	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. 48km E Cocklebiddy 100m	Roadside bank	Volunteering well on roadside banks and ditches. Perennial shrubs
470	*Atriplex hypoleuca*		Australia West. Aust. River flats near Belmont Park racecourse Sea level	Shelly bank retaining dredged mud	Prostrate, dense mat leafy, small leaves monoecious. Perennial ? shrub
471	*Atriplex undulata*	Wavy leaf saltbush	Argentina		
472	*Halimione portulacoides* var. *portulacoides* (= var. *appendiculata*)		Tunisia Oued Akarit 30km N Gabes		Perennial shrub
473	*Maireana brevifolia*	Bluebush	Australia West. Aust. W Lake Pingarnup about 12.8km S Pingrup	Salty soils in vicinity of lake	Reddish stems and pink flowers. Perennial shrub
474	*Atriplex* sp.		Australia West. Aust. Seepage plot at D.G. Weir's property Ongerup	Margins of seepage	Large spreading bushes, seeding bracts rather like *A. halimus*. Perennial
475	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. W shore Lake Pingarnup 12.8km S Pingrup	Flat with other halophytes by road round lake	Perennial

No.	Botanical name	Common name	Locality and approx. altitude (metres)	Habitat	Description
476	*Maireana oppositifolia*		Australia West. Aust. W shore Lake Pingarnup 14.4km S Pingrup	Amongst samphire on bank around lake. Very salty areas.	Erect, with small angular finely hirsute leaves. Perennial
477	*Puccinellia* sp.		Australia West. Aust. W shore Lake Pingarnup S Pingrup	Amongst samphire in hollows back from lake	May be annual
478	*Atriplex* sp.		Australia West. Aust. About 11km N Pingrup — Lake Grace Road	Roadside bank	Fine brittle perennial
479	*Elymus vivescans*		Argentina		Grass
480	*Elymus sabulosus*		As 401		Grass
481	*Agropyron elongatum*	Tall wheat grass	As 401		Perennial grass
482	*Agropyron elongatum*	Tall wheat grass	As 401		Perennial grass
483	*Agropyron elongatum*	Tall wheat grass	As 401		Perennial grass
484	*Halimione portulacoides* var. *portulacoides* (= var. *appendiculata*)		Tunisia M. Souassi		Shrub perennial
485	*Atriplex semibaccata*	Creeping saltbush	Chile Santiago		Biennial shrub, prostrate

486	*Tetragonia arbuscula*				Shrub, perennial
487	*Sporobolus airoides*	Alkali sacaton	U.S.A. New Mexico		
488	*Salvia sonomensis*	Creeping or Sonoma Sage	U.S.A. California Lake County 450m	500-750mm rainfall Nov.-Mar. temp. range 9° – 43°C. Soil neutral to slightly acid.	Similar habit to *Galenia secunda*, but stem layers. Not salt tolerant
489	*Atriplex isatidea*		Australia West. Aust. Beach at Geraldton 1.5m	Sand near beach. Occurs from south coast north as far as Onlsow	Huge shrub trunk to 0.25m thick. Probably endemic
490	*Maireana platycarpa*		Australia West. Aust. Wilcox and Malcolm collection grown at Wiluna Ground Water Research Station		
491	*Maireana triptera*		As 490		
492	*Atriplex hymenotheca*		As 490		
493	*Atriplex hymenotheca*		As 490		
494	*Mairiana pentatropis*		As 490		
495	*Maireana tomentosa*		As 490		
496	*Maireana tomentosa*		As 490		
497	*Maireana pyramidata*	Black bluebush	As 490		

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
498	*Atriplex lentiformis*	Quail brush	U.S.A. Arizona P.M.C. Tucson Acc. No. A-17156 Lot No. 4940	Plant Material Centre	Germination on 27/11/70 95%
499	*Maireana planifolia*		Australia West. Aust. Property A.E. & N. North, Pintharuka	Watertable saltland red clay loam	Small, round-flat-leaved perennial shrub. Hairy leaves grey-green.
500	*Atriplex bunburyana*	Silver saltbush	As 499	As 499	Medium sized virogous perennial
501	*Halimione portulacoides* var. *portulacoides* (= var. *appendiculata)*		Tunisia		
502	*Atriplex polycarpa*	Allscale or desert saltbush	U.S.A. California Tinemaha Reservoir Inyo County 1220m	Deep coarse textured soils, 125-150mm rain, frost to −9.5° C, summer to 43.3° C.	
503	*Atriplex polycarpa*	Allscale or desert saltbush	U.S.A. California Temblor Mountains, W Kern County		
504	*Atriplex polycarpa*	Allscale or desert saltbush	U.S.A. California Panoche Hills, W Fresno County	Same general area as 'McKittrick' accession featured in research by J. Chatterton	
505	*Puccinellia fasciculata*		Australia South Aust.		

506	*Sporobolus* sp.		Australia West. Aust. Kununurra Near sea level		
507	*Melaleuca thyoides*		Australia West. Aust. S end Lake Camm	With samphire at lake margin exposed to winds	Dense large hemispherical shrub about 1.5m
508	*Panicum* sp.		Australia West. Aust. North Samphire ?	Sand flat	
509	*Cynodon dactylon*	Couch	Australia West. Aust. Just S Broome	Mud flat	
510	*Puccinellia maritima*		Netherlands Oostvoorne	Sandy saline soil	
511	*Puccinellia retroflexa*		As 510	Sandy brackish soil	
512	*Enchylaena tomentosa*	Ruby saltbush	Australia West. Aust. Near Three Springs	Roadside, saline	Seedlings
513	*Atriplex lindleyi* subsp. *inflata*		Australia West. Aust. Pingrup	Lunette of windblown soil from salt lake bed	Annual volunteering in fenced plot
514	*Maireana thesioides*		Australia West. Aust. Carnarvon		
515	*Maireana polypterygia*		As 514		
516	*Maireana georgei*		As 514		
517	*Enchylaena tomentosa*	Ruby saltbush	As 514		

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
518	*Symonanthus aromaticus*		Australia West. Aust. Lake Biddy	Calcareous disturbed soil near borrow pit	Strongly aromatic, branching from base, about 1m H
519	*Threlkeldia diffusa*		Australia West. Aust. M. O'Donnell's property NE Katanning	Salt affected flat	Succulent shrub up to 0.5m H
520	*Sporobolus virginicus*	Sand couch	Australia West. Aust. Mouth Greenough River Sea level +	Sandy shelf about 1m above water level beside estuary with samphire	Perennial rhizomatous grass
521	*Uniola paniculata*	Sea oats	U.S.A. North Carolina Emerald Isle Near sea level	Coastal sand dunes	Grass
522	*Acacia cyclops*		Australia West. Aust. Hamelin Bay Near sea level	Limestone headlands	Low dense shrub
523	*Simmondsia chinensis*	Jojoba	U.S.A. California Univ. of California, Dept. of Plant Sciences, Riverside		
524	*Atriplex cinerea*	Grey saltbush	Australia West. Aust. Foredune at Geraldton 'back' beach Near sea level	Dune sand	Low growing shrub
525	*Scaevola crassifolia*		Australia West. Aust. 3.25km S Geraldton 'back' beach. Near sea level	Loamed and levelled area (normally grows behind foredune)	Low growing shrub

526	*Nitraria billardieri*		Australia West. Aust. Geraldton Near sea level	Foredune	Perennial shrub, low growing
527	*Tetragonia decumbens*		Australia West. Aust. Busselton	Foredune	Perennial shrub, fleshy leaved mat forming sand binding
528	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. N Namban by Geraldton Highway	Well drained red loamy soil, not markedly saline	Perennial shrub, largely dioecious, with black fungal disease
529	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. A few km S Morawa road to Perenjori 300m	Road verge, not markedly saline	Perennial shrub
530	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. By Three Springs – Morawa road 300m	Road verge and grazed scrub	Very large old bushes in road reserve and bushes up to 2m H in paddock
531	*Rhagodia preissii* subsp. *obovata*		Australia West. Aust. Babbage Island, Carnarvon	Sea-front dunes	Succulent perennial shrub
532	*Eulalia fulva*		Australia West. Aust. Babbage Island, Carnarvon Sea level +	Blow-out in coastal dune	Perennial grass
533	*Nitraria billardieri*		Australia West. Aust. Carnarvon, near Highway Motel Sea level +	Roadside near salt flat	Spreading succulent perennial shrub

No.	Botanical name	Common name	Locality and approx. altitude (metres)	Habitat	Description
534	*Sporobolus virginicus*	Sand couch	As 532	Dunes and marshy areas near jetty	Perennial rhizomatous grass Rhizomes to at least 0.5m vertically down
535	*Acacia sclerosperma*		Australia West. Aust. Babbage Island, Carnarvon 1-5m	Coastal dunes	Spreading perennial shrub
536	*Myoporum acuminatum*		As 535	Coastal dunes	Spreading perennial shrub
537	*Acacia coriacea*		As 535	Coastal dunes	Spreading perennial shrub up to 6m D
538	*Acacia merrallii*		Australia West. Aust. A few km W Lake Biddy	In borree scrub in low-lying mildly saline area	Straggly shrub
539	*Acacia merrallii*		Australia West. Aust. W Hyden	Roadside table drain low-lying and a bit saline	Prostrate shrub, dense cover, perennial
540	*Phymaspermum parvifolium*		South Africa Pretoria Department of Agriculture Technical Services Private Bag 179		C.P.I. 56969 Perennial shrub from winter rainfall area Probably sand binder
541	*Stipagrostis ciliata*		As 540		C.P.I. 56970 Perennial grass, dry sandy areas 102mm rainfall autumn germination in summer rain area
542	*Tetragonia arbuscula*		As 540		C.P.I. 56964 Perennial shrub, unpalatable, salt tolerant, not as good as saltbushes
543	*Osteospermum sinuatum*		As 540		C.P.I. 56968 Winter rainfall (approx. 203mm area) perennial shrub, grows on acid sandy soils, takes a bit of salt, used for stabilising sandy soils. Palatable. Not very frost resistant

544	*Felicia muricata*		As 540		C.P.I. 56967
545	*Pollichia campestris*		As 540		C.P.I. 56966
546	*Stipagrostis obtusa*		As 540		C.P.I. 56971 Perennial grass desert sandy soil, autumn (cool period) germination, 102 to 356mm rainfall area
547	*Sutherlandia frutescens*		As 540		C.P.I. 56973 Perennial shrub, palatable, grows in run-on areas in 203 to 406mm rainfall. Relatively salt tolerant. May be good on road verges. Red flowered
548	*Rhigozum obovatum*		As 540		C.P.I. 56965
549	*Indigofera patens*		As 540		C.P.I. 56972 Shrubby legume not very productive, may be poisonous
550	*Salsola tuberculata*		As 540		C.P.I. 57087 Fairly salt tolerant perennial shrub, arid winter rain areas
551	*Osteospermum leptolobum*		As 540		C.P.I. 57086 Occurs in little karoo area. Perennial shrub, not very salt tolerant. Probably palatable. May be useful on verges
552	*Maireana suaedifolia*		Australia West. Aust. Property G. Buktenica 24km ESE Hyden	Sandy surfaced, moderately saline valley floor, recently cleared section, protected from grazing	Open erect — straggly small woody shrub, succulent dark blue-green leaves
553	*Maireana erioclada*		As 552	As 552	Densely leaved very succulent erect woody shrub. Dark blue-green
554	*Atriplex isatidea*		As 532	Coastal foredunes and backdunes	Broad-leaved woody shrub, mound forming. Old seed collected. Plants flowering at time of collection
555	*Enchylaena tomentosa*	Ruby saltbush	Australia West. Aust. Three Springs	Road verge near plots	Very good stand. Grazed regenerating. Yellow berries

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
556	*Enchylaena tomentosa*	Ruby saltbush	As 555		As 555, not as many present, but red berries
557	*Enchylaena tomentosa*	Ruby saltbush	Australia West. Aust. Kambalda		Succulent perennial shrub
558	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. NE Morawa 300m	Salt channel country, on banks	Prostrate perennial shrub layering
559	*Rhagodia* sp.		Australia West. Aust. NW Morawa 8.05km by main road	As 558	Cuttings
560	*Atriplex amnicola*	River saltbush	Australia West. Aust. Barnong Station, Yalgoo 300m	Salty and swampy area with *Arthrocnemum* and *Melaleuca*	
561	*Atriplex bunburyana*	Silver saltbush	As 560	As 560	
562	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. Just S Yalgoo by Morawa road 460m		Cuttings
563	*Rhagodia* sp.		Australia West. Aust. S Tardie Station homestead by road to Gabyon 350m	Near gully, non-saline	Cuttings. Perennial shrub
564	*Atriplex amnicola*	River saltbush	Australia West. Aust. Nangarong Pool, Yuin Station 350m	Moist saline soil in flood bed of river	

565	*Sporobolus virginicus*	Sand couch	As 564	As 564	Perennial grass
566	*Maireana brevifolia*	Small leaved bluebush	As 564	As 564	
567	*Atriplex amnicola*	River saltbush	Australia West. Aust. Yalbagabby Pool, Yuin Station 350m	Samphire flats	
568	*Atriplex bunburyana*	Silver saltbush	As 567	As 567	
569	*Atriplex amnicola*	River saltbush	Australia West. Aust. South Paddock, Yuin Station 350m	Near river by-pass	
570	*Atriplex amnicola*	River saltbush	Australia West. Aust. Near Yuin Homestead 350m	Non-saline banks of river	
571	*Atriplex bunburyana*	Silver saltbush	As 569		
572	*Atriplex amnicola*	River saltbush	As 569	Banks of small creek, not markedly saline	
573	*Atriplex amnicola*	River saltbush	Australia West. Aust. Teamurra Pool, Yuin station 350m	Samphire flat	
574	*Atriplex bunburyana*	Silver saltbush	As 573	Below breakaway	Cuttings
575	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. Yuin Station 35m	Near samphire and *Atriplex bunburyana*	

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
576	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. E Woolgorong Station homestead about 8.05km	In mildly saline areas carrying mixed stand of *Atriplex*, samphire, *Maireana* and *Callistemon;* dry creek bed in area	Cuttings
577	*Atriplex amnicola*	River saltbush	As 576	As 576	Seed and cuttings. Some crossing with *Atriplex bunburyana* as evidenced by seeds borne singly on vertical stems well spaced
578	*Atriplex amnicola*	River saltbush	Australia West. Aust. Woolgorong Billabilong Road near Goonin Well 350m	With samphire in creek bed	
579	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. 1.61km S Sanford River on Twin Peaks-Yuin Road 350m	Extensive saltbush flats	
580	*Atriplex amnicola*	River saltbush	As 579	As 579	
581	*Atriplex amnicola*	River saltbush	Australia West. Aust Sanford River S of Twin Peaks Station 350m	River bed	
582	*Atriplex amnicola*	River saltbush	Australia West. Aust. Twin Peaks Station near boundary with Billabilong on road 350m	Rather dry sandy flat with samphire	

583	*Atriplex amnicola*	River saltbush	Australia West. Aust. Billabilong Station near Boundary well 350m	With samphire, *Atriplex bunburyana, Eucalyptus camaldulensis* and *Acacia* on mildly saline flood plains.	Very vigorous perhaps crossing with *Atriplex bunburyana*
584	*Atriplex bunburyana*	Silver saltbush	As 583	As 583	Vigorous
585	*Atriplex amnicola*	River saltbush	Australia West. Aust. Billabilong Station, Murchison River Crossing on Twin Peaks Station Road 350m	Banks of river	
586	*Atriplex amnicola*	River saltbush	Australia West. Aust. Billabilong Station just S Wongoolia Outcamp 350m		
587	*Atriplex amnicola*	River saltbush	Australia West. Aust. SW Birrin Pool, S Meeberrie Station 350m	With samphire and *Frankenia* on salty flats near Murchison River	
588	*Atriplex amnicola*	River saltbush	Australia West. Aust. Meeberrie Station stud ewe paddock 350m	Alluvial flats mildly saline	
589	*Ptilotus divaricatus* ?		As 588	As 588	

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
590	*Sporobolus* sp.		Australia West. Aust. Killer paddock Wooleen Station N of homestead 350m	Clay soil on bordēr of Wooleen Lake	Perennial rhizomatous grass, largely a pure stand
591	*Atriplex amnicola*	River saltbush	As 590	As 590	Small bushes spreading by seed
592	*Atriplex amnicola*	River saltbush	Australia West. Aust. S end of Wooleen Lake, Yewlands area 350m		
593	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. Near 592 350m		Cuttings
594	*Atriplex amnicola*	River saltbush	Australia West. Aust. Beringarra Station river crossing near woolshed 350m	Flood plains of Murchison River apparently dry and non-saline	
595	*Rhagodia* sp.		As 594	As 594	Cuttings
596	*Atriplex amnicola*	River saltbush	Australia West. Aust. Mileura Station 350m	River crossing	
597	*Atriplex bunburyana*	Silver saltbush	As 596	As 596	Cuttings

598	*Atriplex amnicola*	River saltbush	Australia West. Aust. Mileura Station near Southern Creek 350m	Alluvial flats	
599	*Atriplex amnicola*	River saltbush	Australia West. Aust. Moorarie Station near Murchison River by Mt Hale Road 350m	Alluvial flats	
600	*Atriplex amnicola*	River saltbush	Australia West. Aust. Moorarie Station by main road, Hope River 350m	Alluvium	Cuttings
601	*Atriplex amnicola*	River saltbush	Australia West. Aust. Belele Station, Hope River boundary between Yalga and Boolgooroo paddocks 350m	With samphire in river bed	
602	*Atriplex amnicola*	River saltbush	Australia West. Aust. Belele Station Thatalbra paddock 350m	Alluvial flats	
603	*Atriplex amnicola*	River saltbush	Australia West Aust. Belele Station, Moongamoonga Saltbush Exclosure 350m		

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
604	*Atriplex amnicola*	River saltbush	Australia West. Aust. Belele Station, Minderoo paddock on banks of Yalga River 350m		Extremely hard grazed; cuttings
605	*Atriplex amnicola*	River saltbush	Australia West. Aust. Wire Pool on Cue-Coodardy Road 350m	Creek crossing with samphire and *Acacia* on red sandy soil	
606	*Atriplex amnicola*	River saltbush	Australia West. Aust. Sanford River on Coodardy Station 350m	River bed with samphire; salty	
607	*Atriplex amnicola*	River saltbush	Australia West. Aust. Cue- Mt. Magnet road near Daydawn 350m	With samphire and *Frankenia* in salty watercourse	
608	*Atriplex amnicola*	River saltbush	Australia West. Aust. Lake country on Maranalgo Station by road from Paynes Find 350m	Claypan and banks. Large bushes in former many small ones on latter	Cuttings and seed
609	*Maireana pyramidata*	Black bluebush	Australia West. Aust. E Lake Moore Maranalgo Station 350m	Red sandy ridges	Very large bushes, good stand

610	*Atriplex vesicaria*	Bladder saltbush	As 609	Saltbush flats	
611	*Atriplex bunburyana*	Silver saltbush	As 609	Small flat of very old bushes; little grazed	
612	*Atriplex amnicola*	River saltbush	Australia West. Aust. SE Lake Biddy Pindabunna Station 350m	Small clay flat	
613	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. Remlap Station N end by Paynes Find road 350m	Margin of samphire flat	
614	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. Remlap Station roadside 350m	Saltlake area	Spreading form
615	*Symonanthus aromaticus*		Australia West. Aust. SE Lake Biddy townsite 300m	Lime rich grey soil near borrow pit at roadside	Perennial shrub
616	*Halimione verrucifera*		Iran 55km S Ghazvin	Valadabad exclosure	Perennial shrub
617	*Enchylaena tomentosa*	Ruby saltbush	Australia West. Aust. W. Moulyinning 350m	By gravel road W property of O. Mott	Spreading shrub
618	*Hedysarum carnosum*		Algeria Hodna		FAO Seed Accession Number 31.682
619	*Halimione portulacoides* var. *portulacoides (= var. appendiculata)*		Tunisia Souassi		FAO Seed Accession Number 31.681

No.	Botanical name	Common name	Locality and approx. altitude (metres)	Habitat	Description
620	*Acacia lanuginosa*		Australia West. Aust. E Buniche E Lake Grace 400m	Sandy mildly saline wash with *Arthrocnemum* and other spp.	Spreading dense perennial shrub 2m D
621	*Melaleuca adnata*		Australia West. Aust. W of Moulyinning	Road verge near *Eucalyptus salmonophloia*	Perennial shrub, dense about 1m H 2m D
622	*Acacia lineolata*		Australia West. Aust. E Kukerin turn-off on Dumbleyung-Lake Grace Road	As 621	Perennial spreading shrub
623	*Acacia merrallii*		Australia West. Aust. N Dumbleyung	Road verge with *Eucalyptus salmonophloia*	Spreading perennial shrub
624	*Maireana tomentosa*		Australia West. Aust. SE Boulder	Wash below mine dumps with samphire	Small to medium shrub like *M. brevifolia*
625	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. Kambalda	Sandy wash receiving extra water but is saline	
626	*Atriplex bunburyana*	Silver saltbush	As 625	As 625	
627	*Eremophila scoparia*		As 625	As 625 (also found with samphire near Boulder)	Fine leaved somewhat silvery shrub
628	*Atriplex hymenotheca*		As 625	Mine residue overlying, soil moist and saline	Semi prostrate shrub small leaved, 1-2m D
629	*Halosarcia pruinosa*		As 628	As 628	
630	*Atriplex nummularia*	Old man saltbush	Australia West. Aust. Old mine S Boulder	On old dump, saline	

631	*Maireana suaedifolia*		Australia West. Aust. Boulder	Salty banks near Great Boulder mine and playground	Straggly shrub
632	*Atriplex stipitata*		As 631	As 631	
633	*Cratystylis subspinescens*		Australia West. Aust. Kanowna Road, 8-16km from Kalgoorlie	Depression in red soil, non-saline	Perennial shrub 1-2m D
634	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. Kanowna mine	Drift sand near mine dump	
635	*Atriplex nummularia*	Old man saltbush	As 634	Detritus below mine dumps	
636	*Atriplex vesicaria*	Bladder saltbush	As 634	Old mine dumps eroded down	
637	*Atriplex stipitata*		Australia West. Aust. Coolgardie mine dump	On mine dump, very saline	
638	*Atriplex nummularia*	Old man saltbush	As 637	As 637	
639	*Enchylaena tomentosa*	Ruby saltbush	Australia West. Aust. Coolgardie mine	Top and side of dump	
640	*Atriplex hymenotheca*		As 639	Base of dump in washed residue	Spreading shrub. Perennial (?)
641	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. Battery and mine S Widgiemooltha	Saline mine dump	
642	*Atriplex nummularia*	Old man saltbush	As 641	Mine area	

No.	Botanical name	Common name	Locality and approx. altitude (metres)	Habitat	Description
643	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. E Norseman on Eyre Highway (539 mile peg 864km)	Rolling hills with eucalypt forest and shrub understorey	
644	*Atriplex vesicaria*	Bladder saltbush	As 643	As 643	
645	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. Eyre Highway 98km W of Caiguna (622 mile peg 996km)		
646	*Atriplex bunburyana*	Silver saltbush	As 645	As 645	
647	*Nitraria billardieri*		Australia West. Aust. Eyre Highway, Mundrabilla Station turn-off	Coastal plain, nearly treeless with various halophilous shrubs	
648	*Maireana sedifolia*		As 647	As 647	
649	*Atriplex nummularia*	Old man saltbush	As 647	As 647	
650	*Cratystylis conocephala*		Australia West. Aust. 6.4km S main road near Mundrabilla Station turn-off	Lime-rich powdery soils of coastal plain	Grey-green perennial shrub
651	*Acacia cyclops*		Australia West. Aust. 31km S Mundrabilla Station turn-off	Salty rocky samphire area	Large spreading

652	*Halosarcia halocnemoides* var. *pterygospermum*	Samphire	As 651	As 651	
653	*Atriplex vesicaria*	Bladder saltbush	As 651	Low sand behind foredunes	
654	*Atriplex cinerea*	Grey saltbush	As 651	Stable dunes 0.2km from beacn and right on foredunes	
655	*Atriplex nummularia*	Old man saltbush	As 651	Behind stable dunes	
656	*Maireana oppositifolia*		As 651	General in dunes and in samphire between and behind dunes	
657	*Atriplex nummularia*	Old man saltbush	Australia West. Aust. 19.3km S Mundrabilla Station turn-off	Coastal plain, lime rich soil	
658	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. Eyre Highway E Madura (822-823 mile peg 1,316km)	Shrub covered coastal plain a few trees, sample from road verge	Very variable. Includes small and large fruits some bushes without vesicles on a proportion of their fruits
659	*Maireana erioclada*		Australia West. Aust. Eyre Highway E Madura (811 mile peg 1,297km)	Gravel pit	
660	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. Eyre Highway E Madura (781 mile peg 1,250km)	Road verge about 0.4km from base of scarp	

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
661	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. Madura, Eyre Highway (780 + mile peg 1,250km)	Road verge on alluvial fan at base of scarp about half way up fan. Eucalypt forest with shrub understorey.	
662	*Atriplex nummularia*	Old man saltbush	Australia West. Aust. Eyre Highway W Madura (768 mile peg 1,229km)	Road verge where road traverses limestone ridge	
663	*Atriplex vesicaria*	Bladder saltbush	As 662	As 662	
664	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. Eyre Highway (760 + mile peg 1,216km)	Road verge, flat between limestone ridges	
665	*Atriplex bunburyana*	Silver saltbush	As 664	As 664	
666	*Atriplex acutibractea*		Australia West. Aust. Eyre Highway, E Cocklebiddy (748 mile peg 1,161km)	Road verge in limestone ridge area	
667	*Atriplex bunburyana*	Silver saltbush	As 666	As 666	
668	*Atriplex vesicaria*	Bladder saltbush	As 666	As 666	
669	*Atriplex pumilio*		As 666	As 666	
670	*Enchylaena tomentosa*	Ruby saltbush	As 666	As 666	
671	*Atriplex nummularia*	Old man saltbush	As 666	As 666	

672	*Atriplex nummularia*	Old man saltbush	Australia West. Aust. Eyre Highway 19km E Cockle-biddy (735 mile peg 1,176km)	Interridge section in drought or fire stricken region many trees dead; near gravel pit	
673	*Nitraria billardieri*		Australia West. Aust. Eyre Highway (711 mile peg 1,138km)	Depression on plain but very dry and few other species.	Sprawling shrub 3m D
674	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. Eyre Highway E Caiguna (696 mile peg 1,114km)	Road verge. Ridge and depression in plain	
675	*Atriplex bunburyana*	Silver saltbush	As 674	As 674	
676	*Atriplex leptocarpa*		As 674	As 674	
677	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. Eyre Highway (670 mile peg 1,072km)		
678	*Atriplex leptocarpa*		As 677	As 677	
679	*Atriplex bunburyana*	Silver saltbush	As 677	As 677	
680	*Atriplex nummularia*	Old man saltbush	As 677	As 677	
681	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. Eyre Highway (W of 670 mile peg 1,072km)	Vegetated clay pan	

No.	Botanical name	Common name	Locality and approx. altitude (metres)	Habitat	Description
682	*Atriplex vesicaria* hybrid ?	Bladder saltbush	As 681	As 681	May be intergraded with *A. bunburyana*
683	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. Eyre Highway (643 mile peg 1,029km)	Claypan in eucalypt zone	
684	*Atriplex nummularia*	Old man saltbush	Australia West. Aust. Eyre Highway (627 mile peg 1,006km)	Claypan with bluebush, samphire and saltbush forming a good stand	
685	*Atriplex vesicaria*	Bladder saltbush	As 684	As 684	
686	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. Eyre Highway (610 mile peg 976km)	Well vegetated clay pan surrounded by open eucalypt forest	
687	*Nitraria billardieri*	Nitre bush	As 686	As 686	Cuttings of layering branches collected
688	*Atriplex bunburyana*	Silver saltbush	As 686	As 686	
689	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. Eyre Highway (591 mile peg 946km)	Near W extremity of structural Nullarbor, but well vegetated with open eucalypt forest; shrub cover of chenopods and *Cratystylis*	
690	*Atriplex bunburyana*	Silver saltbush	As 689	As 689	
691	*Atriplex nummularia*	Old man saltbush	As 689	As 689	
692	*Atriplex nummularia*	Old man saltbush	Australia West. Aust. Eyre Highway (577 mile peg 923km)	Near beginning of Nullarbor plain	
693	*Atriplex vesicaria*	Bladder saltbush	As 692	As 692	

694	*Atriplex bunburyana*	Silver saltbush	As 692	As 692	
695	*Atriplex nummularia*	Old man saltbush	Australia West. Aust. Eyre Highway (563 mile peg 901km)	Road verge in rolling hills with eucalypt forest	
696	*Atriplex bunburyana*	Silver saltbush	As 695	As 695	
697	*Enchylaena tomentosa*	Ruby saltbush	As 695	As 695	
698	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. Eyre Highway (621 mile peg 994km)	Forested rolling hills, soils rich in nodular limestone	
699	*Spartina patens*		U.S.A. Maryland Elliott Island Dorchester County		USDA SCS Accession BN-10340-58
700	*Spartina alterniflora*		U.S.A. Maryland Assateague Island		USDA SCS Accession 17137-65
701	*Atriplex paludosa*	Marsh saltbush	Australia South Aust. St. Kilda on St. Vincent's Gulf 24km N of Adelaide		
702	*Agropyron elongatum* cv. Largo	Tall wheat grass	Australia Victoria Commercial strain purchased may 1973 from J. Coles		

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
703	*Atriplex paludosa*	Marsh saltbush	Australia South Aust. Port Wakefield		
704	*Spartina patens*		U.S.A. New Jersey New Jersey Plant Materials Centre		NJ 1461
705	*Spartina patens*		U.S.A. Georgia Americus Plant Materials Centre		AM 2914
706	*Spartina patens*		U.S.A. Georgia Americus Plant Materials Centre		AM 2915
707	*Spartina patens*		U.S.A. Georgia Americus Plant Materials Centre		
708	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. S Dukin	Road verge	
709	*Atriplex isatidea*		Australia West. Aust. Geraldton	Sand dunes on coast	
710	*Simmondsia chinensis*	Jojoba	Israel Beersheva		CSIRO C.P.I. 58822
711	*Simmondsia chinensis*	Jojoba	Australia N.S.W. Rangelands Research Deniliquin		CSIRO C.P.I. 56999 PI 254468
712	*Simmondsia chinensis*	Jojoba	As 711		CSIRO C.P.I. 57001 PI 254498

713	*Simmondsia chinensis*	Jojoba	As 711		CSIRO C.P.I. 57000 PI 254482
714	*Atriplex undulata*	Wavy leaf saltbush	Argentina		
715	*Atriplex hymenotheca*		Australia West. Aust. 108km from Albany on Borden Road — salt flat		
716	*Atriplex repanda*		Chile		
717	*Maireana tomentosa*		Australia West. Aust. 85km W Warburton	Alluvial sandy loam	
718	*Atriplex vesicaria*	Bladder saltbush	As 717	Base breakaway	
719	*Atriplex vesicaria*	Bladder saltbush	As 717	On breakaway. From stone outcrop	
720	*Atriplex vesicaria*	Bladder saltbush	As 719	As 719	
721	*Atriplex vesicaria*	Bladder Saltbush	As 717	Alluvial near breakaway	
722	*Maireana triptera*		Australia West. Aust. 87km W Warburton	Alluvial loamy sand. Old bushes dead or dying, many seedlings, mildly saline	
723	*Maireana georgei*		Australia West. Aust. 160km W Warburton	On breakaway — gravel. Extra large wings on seed	
724	*Maireana georgei*		As 723	Gravel near breakaway many seedlings	
725	*Maireana villosa*		Australia West. Aust.	Gravelly loam plant with mulga, mildly saline	

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
726	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. 293km W Warburton	Loamy sand plain	Many flowering, but not fruiting. Moderately saline
727	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. 294km W Warburton	Flood plain. Loamy clay. Mildly saline	
728	*Maireana tomentosa*		Australia West. Aust. 309km W Warburton	Sandy loam	
729	*Maireana georgei*		Australia West. Aust. 369km W Warburton	Sandy loam	
730	*Maireana tomentosa*		As 728	Sandy loam	Erect shrub
731	*Maireana georgei*		As 728	Sandy loam	Open — erect
732	*Maireana georgei*		As 728	Sandy loam	Large pink flowers
733	*Maireana georgei*		As 728	Sandy loam	Appears to have white flowers
734	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. 313km W Warburton	Sandy loam, flat plain, mildly saline	Medium size leaves
735	*Maireana georgei*		As 734	Sandy loam, mildly saline along road	
736	*Maireana triptera*		Australia West. Aust. 53km W Cosmo Newberry	Flood channel loamy sand, mildly saline	
737	*Maireana georgei*		As 736	Flood channel, loamy sand, mildly saline	
738	*Bassia prostrata*		U.S.S.R. Kazakhstan		

739	*Bassia prostrata*		As 738		
740	*Atriplex hymenelytra*	Desert holly	U.S.A. California Death Valley		
741	*Baccharis pilularis*	Coyote brush	U.S.A. California		
742	*Atriplex coquimbana*	Goosefoot	Chile 800m		
743	*Osteospermum pachypteris*		As 349		
744	*Atriplex glauca*		Tunisia		
745	*Osteospermum sinuatum*		As 349		
746	*Atriplex spongiosa*		Chile Los Vilos		
747	*Salvia sonomensis*	Creeping sage	U.S.A. California San Diego county 1500m		
748	*Atriplex malvana*		Tunisia Souassi		
749	*Puccinellia distans*	Weeping alkali grass	U.S.A. via N.S.W. Soil Conservation Service		
750	*Atriplex halimus*		Spain 20km N Zaragosa by road to Huesca	Low lying area, irrigation nearby	
751	*Atriplex halimus*		Spain 5km S Huesca	Roadside with *Festuca arundinacea*	

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
752	*Puccinellia distans*		United Kingdom Cheshire Sandback	Inland saline area	
753	*Puccinellia rupestris*		United Kingdom S England	Greenhouse grown	Mixed stock — open pollinated
754	*Puccinellia maritima*		United Kingdom Norfolk Holkham National Nature Reserve Lodge Marsh, Wells	Shingle ridge and mud	Short plants — open pollinated
755	*Puccinellia fasciculata*		United Kingdom	Greenhouse	Mixed stock — open pollinated
756	*Puccinellia distans*		As 755	Greenhouse	Mixed stock — open pollinated
757	*Puccinellia maritima*		As 754	Among *Halimione* at high mid-level salt marsh	Tall plants
758	*Puccinellia capillaris*		As 755	Greenhouse	Mixed stock — open pollinated
759	*Puccinellia maritima*		As 754	Mid-level salt marsh dense sward	Medium sized plants
760	*Festuca rubra*		As 755	Cliff face	Bassets
761	*Festuca rubra*		As 755	Marsh	Aber, Marsh type
762	*Puccinellia* sp.		France Arcachon, SW coast	Banks around excavated pools near sea level	
763	*Geijera linearifolia*		Australia West. Aust. S Mundrabilla	Stabilised low coastal dunes	Small tree to large shrub
764	*Templetonia* sp.		As 763	Back of coastal dunes near samphire flat	Small tree

765	*Acacia leptospermoides*		Australia West. Aust. Kunjin beside Brookton-Corrigin Rd near S. Hewitt's property in rail reserve	*With Eucalyptus salmonophloia*	Prostrate perennial shrub
766	*Enchylaena tomentosa*	Ruby saltbush	Australia West. Aust. Carnarvon		
767	*Maireana polypterygia*		As 766		
768	*Maireana polypterygia*		As 766		
769	*Maireana georgei* and *M. tomentosa* mixture				Black fruit and pale gold respectively
770	*Atriplex vesicaria*	Bladder saltbush	As 766		
771	*Maireana tomentosa*		Australia West. Aust. Wiluna		
772	*Maireana tomentosa*		As 771		
773	*Atriplex halimus*		Australia West. Aust. Gascoyne Res. Stn.		
774	*Maireana georgei*		As 766		
775	*Maireana pentatropis*		As 774		

No.	Botanical name	Common name	Locality and approx. altitude (metres)	Habitat	Description
776	*Maireana polypterygia*		As 774		
777	*Maireana platycarpa*		As 755		
778	*Suaeda australis*		Australia West. Aust. T. Rhodes' property Narrogin Valley	Bare salt alongside saline drainage line	Smallish plant (0.2m D × 0.2m H) annual or biennial very palatable to stock
779	*Puccinellia ciliata*		Australia West. Aust. Waters, Gabalong	Beside channel in salt valley	A broad-leaved variety of *Puccinellia* growing amongst more common type
780	*Simmondsia chinensis*	Jojoba	U.S.A. Arizona San Carlos — Globe area Eastern-Central Arizona		
781	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. S Damboring (145 mile peg 232km)	Bank in lake channel country and York gum *(Eucalyptus loxophleba)*	
782	*Eragrostis setifolia*	Neverfail	Australia West. Aust. 16km W Gascoyne Junction	Jimba Land System with samphire and *Acacia sentis*	
783	*Atriplex glauca*		Australia West. Aust. Quairading		Vigorous volunteers at primary test site on R. Haythornthwaite's property
784	*Atriplex amnicola*	River saltbush	Australia West. Aust. 40km E Gascoyne Junction, Pell's Creek on Bidgemia Station	Creek bed flooded areas, mildly saline	

785	*Eragrostis dielsii*		Australia West. Aust. S Morawa	Roadside lake channel at Carnarmah turn-off	
786	*Atriplex bunburyana* × *A. vesicaria*		Australia West. Aust. 10km N Tardun turn-off	Natural stand by road adjacent to samphire flat	
787	*Atriplex amnicola*	River saltbush	Australia West. Aust. Gt. Northern Highway (562 mile peg 899km)	Claypan with run-off water	Large bushes
788	*Atriplex amnicola*	River saltbush	Australia West. Aust. Yaringa Station turn-off Gt. Northern Highway	Roadside with samphire other *Atriplex*, *Rhagodia* and *Nitraria*	
789	*Atriplex vesicaria*	Bladder saltbush	Australia West. Aust. Gt. Northern Highway (518 mile peg 829km)	Table drain saltbush clothed breakaway. Seed off ground	
790	*Atriplex bunburyana*	Silver saltbush	As 785	With samphire and *Acacia* in banks in salt channel area. Seed off ground	
791	*Atriplex amnicola*	River saltbush	Australia West. Aust. Byro Station, Yarra Yarra 3km S homestead	Good lightly grazed area	
792	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. 2-3km N Wooramel River	Margins of eroded claypans	
793	*Atriplex amnicola*	River saltbush	Australia West. Aust. 16km W Gascoyne Junction	Creek bed	

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
794	*Atriplex muelleri*		Australia West. Aust. R.K. Stout's property Dukin		
795	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. 70km S Carnarvon	Non-saline road verge and *Acacia*	
796	*Atriplex bunburyana* × *A. stipitata*		*As 794*		
797	*Atriplex stipitata*		As 796		
798	*Atriplex muelleri*		As 796		
799	*Atriplex bunburyana*	Silver saltbush	As 796		
800	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. (365 mile peg) 584km Gt. Northern Highway, 3km S Binnu	Natural stand with samphire high level salt flats uncleared, also road verge	
801	*Atriplex exilifolia*		As 794		
802	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. 2km N Billabong Roadhouse	Non-saline red loamy sand and *Acacia* sp.	
803	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. S of (148 mile peg 238km) and N Watheroo	Road realignment pit	

804	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. 5.8km N Ballidu (145 mile peg 232km) S Damboring	Bank in lake channel country and York gum	Extensive area
805	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. (498 mile peg 797km) on Gt. Northern Highway a few km off Woodleigh turn-off	Red loamy sand flats between limestone ridges and perennial grass and *Acacia* sp.	
806	*Atriplex cinerea*	Grey saltbush	Australia South Aust. Semaphore Park, Adelaide	Invading frontal dunes by sea	Appeared a little more erect than 524
807	*Atriplex paludosa*	Marsh saltbush	Australia West. Aust. Mouth of Murchison River	Cliff face S Red Bluff	
808	*Atriplex* sp.		Australia West. Aust. Kalbarri near Murchison Park Caravan Park	Beach front of estuary	
809	*Atriplex stipitata*		Australia West. Aust. Bullfinch	Mine dumps	
810	*Atriplex nummularia*	Old man saltbush	Australia West. Aust. Coolgardie	Hill slope *Eucalyptus torquata* an associate	
811	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. E Kulin — 5km E Parker's property on roadside.		
812	*Spartina patens*		U.S.A.		

No.	Botanical name	Common name	Locality and approx. altitude (metres)	Habitat	Description
813	*Spartina alterniflora*		As 812		
814	*Trifolium ornithopodioides*		Australia West. Aust. Mundijong		
815	*Trigonella faenum-graecum*		U.S.S.R. Armenia		CPI 70724
816	*Trigonella faenum-graecum*		U.S.S.R. Turkmenia		CPI 70726
817	*Trigonella grandiflora*		U.S.S.R. Uzbekistan		CPI 70727
818	*Trigonella faenum-graecum*		U.S.S.R. Azerbaijan		CPI 70725
819	*Trifolium ornithopodioides*		Australia West. Aust. Albany		
820	*Trifolium ornithopodioides*				Selection (early) non-shedding annual MI-4/75
821	*Trifolium ornithopodioides*				Selection (late) non-shedding annual MI-38/75
822	*Trigonella suavissima*				Perennial N 913
823	*Trigonella suavissima*				Perennial C 1313
824	*Trigonella suavissima*				Perennial Q 802
825	*Trigonella suavissima*				Perennial N 851

826	*Trigonella noeana*		Lebanon		Mixture wild species CPI 24157
827	*Trigonella faenum-graecum*				Perennial C 1310
828	*Trigonella cretica*		Hungary		Perennial CPI 23331
829	*Trigonella cylindracea*				CPI 15340
830	*Trigonella coerulea*				CPI 38123
831	*Trigonella coerulea*		The Netherlands Leiden		Perennial CPI 36710
832	*Trigonella coerulea*		Belgium Brussels		Perennial CPI 36546
833	*Trigonella coerulea*		Hungary Budapest		Perennial CPI 35774
834	*Trigonella callicuas*		Portugal		Perennial CPI 13113
835	*Trigonella arabica*		As 349		Perennial CPI 48455
836	*Trigonella corniculata*				Perennial N 811
837	*Trigonella cretica*		Sweden		Perennial CPI 19634
838	*Atriplex semilunaris*		Australia West. Aust. Property of C. Chapman, Winchester	Saline land recently fenced off	Prostrate, vigorous heavily seeding
839	*Atriplex amnicola*	River saltbush	Australia West. Aust. Carnarvon	Flood plains of Gascoyne River	Sprawling shrub

No	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
840	*Atriplex bunburyana*	Silver saltbush	As 839	Flood plains near Gascoyne River	
841	*Atriplex lentiformis*	Quail brush	Australia West. Aust. Melville	Home garden	Vigorous growing shrub
842	*Atriplex amnicola*	River saltbush	Australia West. Aust. Eradu bridge on Greenough River, Geraldton-Mullewa Road	Banks of river	Sprawling shrubs
843	*Prosopis tamarugo*	Tamarugal	Chile		
844	*Agropyron elongatum*	Tall wheat grass	Australia South Aust.		CPI 22085
845	*Atriplex amnicola*	River saltbush	Australia West. Aust. Greenough River on Yuna-Tenindewa Road	Bed of river on banks	
846	*Maireana tomentosa*		Australia West. Aust. Road verge W Greenough on Mullewa-Geraldton Road	Non-saline road verge	
847	*Melaleuca halmaturorum*	South Australian Paperbark	Australia Victoria W Mount Arapiles	Native to swampy saline soils of South Aust. coast and edges of inland salt lakes	Paper barked small tee, foliage dense dark green, crown white flowers
848	*Atriplex paludosa*	Marsh saltbush	As 844	Salty alluvial soil	
849	*Atriplex vesicaria*	Bladder saltbush	as 848	As 848	

850	*Sorghum* sp.	Sorghum cv. Wiley	As 755		Air pollution indicators
851	*Sorghum* sp.	Sorghum cv. Honey	As 755		As 850
852	*Sorghum* sp.	Sorghum cv. Brandice	As 755		As 850
853	*Nicotiana tabacum*	Tobacco Bel C	U.S.A.		As 850
854	*Nicotiana tabacum*	Tobacco Bel B	As 853		As 850
855	*Nicotiana tabacum*	Tobacco Bel W3	As 853		As 850
856	*Atriplex mollis*		Libya NW el Assa	Salty rangelands average rainfall 100-125mm/year	
857	*Lavendula vera*	Lavender	Australia West. Aust. Jarrahdale	Naturalized in road verges in gravelly soils	
858	*Atriplex nummularia* subsp. *omissa*		Australia South Aust. Millers Creek, Kingoonya		
859	*Eragrostis dielsii*		As 839	Saline alluvial soils, wind eroded and bare	
860	*Atriplex coquimbana*		Chile Los Vilos		
861	*Atriplex repanda*		As 860	As 860	
862	*Melaleuca thyoides*		Australia West. Aust. NE Babakin on road to Narembeen	Extreme salt and water-log tolerance, in salt channel with samphire	3m H, small tree

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
863	*Callistemon phoenecius*		Australia West. Aust. Property of N. Griffiths, NE Wongan Hills	Saline valley flat	Very large shrub to small tree about 3-4m H and 4-5m D
864	*Atriplex isatidea*		Australia West. Aust. Perth Near sea level	Coastal dunes	
865	*Atriplex nummularia* subsp. *omissa*		Australia South Aust. Oodnadatta	Clayey tableland soils	1m H shrub
866	*Puccinellia distans* cv. Fults		U.S.A.		
867	*Atriplex isatidea*		Australia West. Aust. Exmouth	Along beach front	
868	*Pentzia lanata*		South Africa		Shrub ± 0.3m H. Yellow flowers. Well eaten by sheep
869	*Pentzia sphaerocephala*		As 868		Shrub ± 0.4m H. Well eaten by sheep
870	*Pentzia spinescens*		As 868		Shrub ± 0.3m H. Well eaten by sheep
871	*Osteospermum sinuatum*		As 868		Shrub ± 0.3m H. Very well eaten by stock.
872	*Osteospermum pachypteris*		As 868		Shrubs ± 0.4m H. Will take some salinity
873	*Galenia fruticosa*		As 868		Shrub 0.2m H. could possibly take some salinity. Well eaten by stock
874	*Eriocephalus ericoides*		As 868		Shrubs ± 0.3m H. Aromatic leaves

875	*Eriocephalus africanus*		As 868		Shrub ± 1m H. Aromatic leaves
876	*Felicia muricatus*		As 868		Shrub ± 0.15m H. Flowers pale blue rays with yellow centre
877	*Felicia filifolius*		As 868		Shrub ± 0.3m H. Flowers pale blue rays with yellow centre. Well eaten by stock
878	*Lightfootia albens*		As 868		Shrub ± 0.5m H. Well eaten by stock
879	*Tetragonia hirsuta*		As 868		Shrub ± 0.3m H. Will be able to take a degree of salinity
880	*Tetragonia fruticosa*		As 868		Semi prostrate shrub. Will stand a degree of salinity. Well eaten by sheep
881	*Rhigozum obovatum*		As 868		Shrub ± 2m H yellow flowers. Well eaten by stock
882	*Monochlamys albicans*		As 868		Shrub ± 0.4m H. Well eaten by stock. Can take some salinity
883	*Pollichia campestris*		As 868		Shrub 0.15m H. Soft grey green leaf, white sweet fruits. Very well eaten by sheep
884	*Sutherlandia frutescens*		As 868		Shrub ± 0.3m H. Blue grey leaves, red legume flowers. Well eaten by sheep
885	*Indigofera patens*		As 868		Semi-prostrate, legume flowers, brick red. Very palatable to sheep
886	*Hermannia trifurcata*		As 868		Shrub ± 0.35m H. Prefers sandy soil. Good pioneer on old land. Well eaten by sheep
887	*Hermannia trifurcata*		As 868		Shrub ± 0.3m H. Yellow flowers. Well eaten by sheep
888	*Exomis microphylla* var. *axyrioides*		As 868		Shrub ± 0.3m H. Greyish leaves will take a degree of salinity. Well eaten by sheep

No.	Botanical name	Common name	Locality and approx. altitude (metres)	Habitat	Description
889	*Prismatocarpus roelloides*		As 868		Semi-prostrate shrub. Excellent pioneer on denuded areas. Well eaten by stock
890	*Hirpicium integrifolium*		As 868		Shrub ± 0.35m H. Showy yellow flowers. Very well eaten by sheep
891	*Chenopodium gaudichaudianum*		As 839	Near flood levees	
892	*Maireana convexa*		Australia West. Aust. Leonora		
893	*Atriplex breweri*		South Africa		
894	*Maireana polypterygia*	Gascoyne bluebush	As 839		
895	*Maireana pyramidata*	Black bluebush	As 839		
896	*Maireana polypterygia*	Gascoyne bluebush	As 839		
897	*Chenopodium gaudichaudianum*		As 839		
898	*Odyssa paucinervis*		As 868		Grass, salt tolerant
899	*Atriplex halimus*		As 349		
900	*Acacia merrallii*		Australia West. Aust.		
901	*Acacia redolens*		As 900		

902	*Melaleuca cymbifolia*		Australia West. Aust. Hines Hill	Samphire flat	Many volunteers. Fine leaved dense large shrub. Common in the area
903	*Melaleuca laterifolia*		As 902	Edge of samphire flat	Large shrub not many present
904	*Trigonella suavissima*		Australia N.S.W. 60km W Bourke on Wanaaring Rd	Salty and gypseous bank on edge of small samphire flat	Annual herb
905	*Atriplex vesicaria*	Bladder saltbush	Australia N.S.W. SE Kayrunnera Station by White Cliffs Road	Flat near creek	Small shrub
906	*Maireana pyramidata*	Black bluebush	Australia N.S.W. N Balranald	*Casuarina cristata* woodland with *Maireana* spp. *Rhagodia* spp. understorey	Small to medium shrub
907	*Atriplex vesicaria*	Bladder saltbush	Australia N.S.W. 80km W Bourke on Wanaaring Rd on Poison Pt. plain	Extensive ancient lake bed with annuals, cane grass and *Rhagodia spinescens*	
908	*Maireana pyramidata*	Black bluebush	Australia N.S.W. Kayrunnera station NW of White Cliffs	Flats and slopes by creek	Bushes volunteering in old furrows. Good well managed stand
909	*Atriplex amnicola*	River saltbush	As 449	Low lying areas and braided stream area that benefit from concentrated run-off from rainfall	Low spreading habit with great ability to root adventitiously
910	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. Carnarvon 0.5km S 10 Mile Bridge (16km) 20m	Sandy to sandy loam duplex soils frequently interspersed with *Maireana polypterygia* and *Acacia victoriae* (Bohemia)	Upright to over 1m, small leaves persisting during drought

No.	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
911	*Chenopodium auricomum*	Golden goosefoot	Australia West. Aust. Carnarvon. Wetlands E Brown Range 20m	Area subjected to prolonged inundation (coolibah, sage, swamp cane grass)	Upright perennial with soft green branches to 1.5m H during intervals of growth. During drought extended branches die back
912	*Maireana aphylla*	River or Swamp bluebush	Australia West. Aust. Carnarvon. Claypan 2km N Native Mission 20m	Flats subject to inundation and creeklines	Divaricately branched shrub to 1.5m—D
913	*Acacia sclerosperma*	Limestone wattle	Australia West. Aust. Carnarvon. W of Brown Range	From sand dunes to creeklines, very varied	Fast growing shrub/tree sometimes forming trunk up to 0.18m D, maximum 3m H.
914	*Maireana polypterygia*	Gascoyne bluebush	Australia West. Aust. Carnarvon. Bluebush flats N 10 Mile Bridge 16km		
915	*Rhagodia spinescens*	Thorny saltbush	Australia N.S.W. Near Hay		
916	*Atriplex isatidea*		Australia West. Aust. Lights Beach 10km W Denmark		
917	*Atriplex cinerea*	Grey saltbush	Australia West. Aust. Rottnest Island near sea level	Margins of saltlakes, flats around them and low sandy rises	Dense prostrate bushes
918	*Atriplex halimus*		Australia West. Aust. Trayning D. Hulls' property		

919	*Atriplex halimus*		Australia West. Aust. Booralaming K. Stout's property		
920	*Colutea atlantica* or *C. arborescens*		Spain Murcia		
921	*Anthyllis cytisoides*		As 920		
922	*Rumex lunaria*		Spain Canary Islands El Hierro		
923	*Medicago arborea*	Tree lucerne	Tunisia		
924	*Maireana aphylla*		Australia N.S.W. Hay		
925	*Atriplex barclayana*		U.S.A. Arizona		
926	*Melaleuca thyoides*		Australia West. Aust. Meckering, 5-10km E on N side of road	Waterlogged and salt affected area with samphire. *M. thyoides* is on a 0.3m H sandy bank	Spreading large shrub, fine-leaved, 2-5m H
927	*Atriplex vesicaria*		As 839		
928	*Atriplex bunburyana*	Silver saltbush	As 839		
929	*Atriplex vesicaria*		Australia South Aust. Iron Knob, 25km E	By roadside on marginally saline limestone base, loamy sandy clay	
930	*Maireana aphylla*		As 839		
931	*Maireana polypterygia*	Gascoyne bluebush	As 839		
932	*Acacia victoriae*		As 839		

No	*Botanical name*	*Common name*	*Locality and approx. altitude (metres)*	*Habitat*	*Description*
933	*Atriplex amnicola*	River saltbush	As 839		
934	*Atriplex lampa*		Argentina		
935	*Atriplex undulata*	Wavy leaf saltbush	As 934		
936	*Atriplex crenatifolia*		As 934		
937	*Atriplex boecheri*		As 934		
938	*Atriplex argentina*		As 934		
939	*Atriplex bunburyana*	Silver saltbush	Australia West. Aust. Roebourne airstrip		
940	*Acacia citrinoviridis*		Australia West. Aust. Near Mt. Bruce		Bushy tree to 10m H
941	*Eucalyptus camaldulensis*	River gum	Australia West. Aust. Karratha, Nickol River	At tidal zone interface	May be salt tolerant
942	*Acacia coriacea*		Australia West. Aust. S Karratha		Bushy tree to 8m H, weeping foliage
943	*Acacia ampliceps*		Australia West. Aust. Karratha townsite	Shows salt tolerance	Bushy shrub 3m H similar to *Acacia saligna* in south-west. Dense green foliage
944	*Eucalyptus microtheca*		As 941	Parent trees growing at tidal zone interface	May have a degree of salt tolerance

945	*Atriplex cinerea*	Grey saltbush	Australia West. Aust. Rottnest Island Near sea level	Sandy low rises and salt lake margins and coastal rock and beach situations	Excellent prostrate ground cover
946	*Atriplex cinerea*	Grey saltbush	Australia West. Aust. Lights Beach Denmark	Beach and limestone areas	
947	*Atriplex mollis*		Tunisia S Sidi Toui	Highly saline flats < 150mm rain	Hard grazed. strong woody shrub

*In an earlier listing No. 344 appeared as *A. paludosa*. This latter name is now taken to apply to plants with a coastal distribution. *A. bunburyana* occurs in inland areas.

Appendix 2

List of species collected for revegetation of arid areas; saline areas; dunes; mine dumps; roadsides and water ways.

Species name	Accession number
Acacia ampliceps	943
A. citrinoviridis	940
A. coriacea	537, 942
A. cyclops	522, 651
A. lanuginosa	620
A. leptospermoides	765
A. lineolata	622
A. merrallii	538, 539, 623, 900
A. redolens	901
A. sclerosperma	535, 913
A. victoriae	932
Aellenia auricula	307
A. autrani	367
A. glauca	280, 286
A. sub-aphylla	326, 342
Aeluropus littoralis	105, 121, 252, 254, 257, 277, 283, 288, 305, 335, 339, 341
A. littoralis var. *repens*	132
A. repens	218, 255, 325, 328, 338
A. species	233, 249, 268, 269, 295, 297, 314
Agropyron elongatum	137, 481-483, 702, 844
Allenrolfea occidentalis	33, 55
Anabasis articulata	366
A. haussknechtii	356
A. oropediorum	115, 384, 385
Anthyllis cytisoides	921
Aristida ciliata	128, 139, 141, 196
A. plumosa	126, 195, 235, 243
A. scoparia	197
Astragalus species	324
Atriplex acutibractea	666
A. acutibractea subsp. *karoniensis*	407
A. amnicola	401, 402, 404, 405, 411, 421, 437, 440, 560, 564, 567, 569, 570, 572, 573, 577, 578, 580-583, 585-588, 591, 592, 594, 596, 598-608, 612, 784, 787, 788, 791, 793, 839 842, 845, 909, 933
A. argentina	361, 938
A. atacamensis	203, 363
A. barclayana	925
A. boecheri	937
A. breweri	351, 893
A. bunburyana	344, 434, 435, 475, 500, 528-530, 561, 562, 568, 571, 574, 576, 584, 593, 597, 611, 613, 626, 634, 643, 646, 665, 667, 675, 679, 688, 690, 694, 696, 698, 708, 734, 781, 790, 792, 795, 799, 800, 802-805, 811, 840, 910, 928, 939

Species name	Accession number
A. bunburyana x stipitata	796
A. bunburyana x vesicaria complex	682, 786
A. canescens	1, 4, 10, 11, 13, 16, 20, 38, 41, 43, 44, 58, 76, 77, 86, 89-92, 348, 362
A. canescens var. *linearis*	375
A. canescens x nuttallii	28
A. canescens x polycarpa	57
A. cinerea	524, 654, 806, 917, 945, 946
A. confertifolia	9, 12, 14, 18, 79
A. coquimbana	742, 860
A. crenatifolia	936
A. exilifolia	801
A. gardneri	21, 22, 24
A. glauca	95, 96, 99, 101, 109, 116, 119, 138, 744, 783
A. griffithsii	46
A. halimus	98, 106, 110, 377, 380, 386-389, 408, 414-420, 750, 751, 773, 899, 918, 919
A. hastata	304
A. hortense	330
A. hymenelytra	740
A. hymenotheca	393, 492, 493, 628, 640, 715
A. hypoleuca	470
A. isatidea	489, 554, 709, 864, 867, 916
A. lampa	934
A. lentiformis	6, 8, 17, 53, 78, 88, 360, 498, 841
A. leptocarpa	438, 676, 678
A. leucoclada	222, 264, 289, 323, 370
A. leucoclada var. *turcomanica*	352
A. lindleyi subsp. *inflata*	513
A. linearis	62, 63, 65, 66, 70, 73, 74
A. malvana	748
A. mollis	114, 856, 947
A. muelleri	794, 798
A. nummularia	191, 359, 439, 441, 467, 630, 635, 638, 642, 649, 655, 657, 662, 671, 672, 680, 684, 691, 692, 695, 810
A. nummularia subsp. *omissa*	858, 865
A. nuttallii	27, 31, 32
A. obovata	35
A. paludosa	409, 450, 464, 465, 701, 703, 807, 848
A. polycarpa	67, 69, 72, 82, 85, 93, 369, 502-504
A. polycarpa/linearis	64
A. pumilio	669
A. quinnii	206, 358
A. repanda	716, 861
A. rosea	354
A. semilunaris	838
A. semibaccata	432, 433, 485
A. species	5, 23, 80, 162, 205, 251, 294, 298, 394, 474, 478, 808

Species name	Accession number
A. spongiosa	746
A. stipitata	632, 637, 797, 809
A. suberecta	422
A. tartarica	232
A. undulata	471, 714, 935
A. venezuela	353
A. vesicaria	466, 468, 469, 558, 575, 579, 610, 614, 625, 636, 641, 644, 645, 653, 658, 660, 661, 663, 664, 668, 674, 677, 681, 683, 685, 686, 689, 693, 718-721, 726, 727, 770, 789, 849, 905, 907, 927, 929
Baccharis pilularis	741
Bassia eriophora	207
B. indica	231, 364
B. prostrata	198, 378, 738, 739
Bechmania eruciformis	175
Callistemon phoenecius	863
Calliandria eriophylla	49
Calligonum comosum	221, 376
C. species	234
Cenchrus ciliaris	129, 140
C. species	229
Chenopodium auricomum	911
C. gaudichaudianum	891, 897
Colutea atlantica syn *C. arborescens*	920
Camphorosma perenne	258, 322
Cratystylis conocephala	650
C. subspinescens	633
Crypsis aculeata	271
Cymbopogon species	247
Cynodon dactylon	260, 266, 317, 509
Dicanthium annulatum	226
Digitaria nodosa	107
Distichlis stricta	3, 84
Dorycnium hirsutum	382
Elymus sabulosus	480
E. triticoides	*83*
E. vivescans	479
Enchylaena tomentosa	436, 512, 517, 555-557, 617, 639, 670, 697, 766
Eragrostis bipinnata	219, 241
E. dielsii	785, 859
E. papposa	130
E. setifolia	782
Eremophila scoparia	627
Eriocephalus ericoides	874
E. africanus	875
Eucalyptus camaldulensis	941
E. microtheca	944
Eulalia fulva	532
Eurotia ceratoides	199, 309, 337, 368
E. lanata	42, 50, 51
Exomis microphylla var. *axyrioides*	888
Felicia filifolius	877
F. muricata	544, 876
Festuca elatior var. *arundinacea*	123

Species name	Accession number
F. rubra	399, 760, 761
Galenia fruticosa	873
G. pubescens	444
Gobelia species	250
Geijera linearifolia	763
Gymnocarpus species	211
Halimione portulacoides var. *appendiculata*	131, 472, 484, 501, 619
H. portulacoides var. *portulacoides*	472
H. verrucifera	312, 616
Halosarcia halocnemoides var. *pterygospermum*	652
H. pruinosa	629
Haloxylon articulatum	217, 373
Hedysarum coronarium	111, 118, 135, 142, 618
Hermannia trifurcata	886, 887
Hilaria rigida	59, 60, 71, 75
Hirpicium integrefolium	890
Hyparrhenia hirta	224, 248
Indigofera patens	549, 885
Isomeris arborea	2, 81
Jacksonia sericia	451
Lasiurus hirsutus	225
Lavandula vera	857
Lightfootia albens	878
Lolium rigidum	227, 453-461
Lotus corniculatus	315
L. creticus	201, 374
L. lanuginosis	381
Lycium species	68
Maireana aphylla	912, 924, 930
M. brevifolia	429-431, 442, 462, 473 566
M. convexa	892
M. erioclada	553, 659
M. georgei	516, 723, 724, 729, 731, 733, 735, 737, 774
M. georgei/tomentosa mixture	769
M. oppositifolia	476, 656
M. pentatropis	494, 775
M. planifolia	499
M. platycarpa	490, 777
M. polypterygia	515, 767, 768, 776, 894, 896, 914, 931
M. polypterygia?	443
M. pyramidata	410, 497, 609, 895, 906, 908
M. sedifolia	648
M. species	327
M. suaedifolia	552, 631
M. thesioides	514
M. tomentosa	406, 495, 496, 624, 717, 728, 730, 771, 772, 846
M. triptera	491, 722, 736
M. villosa	725
Medicago arborea	923
M. species	236, 244, 262
Melaleuca adnata	621
M. cymbifolia	902
M. halmaturorum	847

Species name	Accession number
M. laterifolia	903
M. thyoides	507, 862, 926
Monochlamys albicans	882
Muehlenbergia porteri	61
Myoporum acuminatum	536
Nicotiana tabacum — Bel C	853
— Bel B	854
— Bel W_3	855
Nitraria billardieri	463, 526, 533, 647, 673, 687
Odyssa paucinervis	898
Oryzopsis coerulescens	133
O. miliacea	220, 371
Osteospermum leptolobum	551
O. pachypteris	743, 872
O. sinuatum	543, 745, 871
Panicum antidotale	228
P. coloratum	400
P. obtusum	15
P. species	508
P. turgidum	193
Pennisetum dichotomum	194
P. divisum	223
P. elatum	134
P. species	215, 216
Pentzia lanata	868
P. sphaerocephala	869
P. spinescens	870
Phymaspermum parvifolium	540
Plantago species	285
Pollichia campestris	545, 883
Prismatocarpus roellioides	889
Prosopis tamarugo	843
Ptilotus divaricatus	589
Puccinellia airoides	445
P. capillaris	758
P. ciliata	391, 397, 398, 412, 424-427, 447, 779
P. distans	100, 122, 136, 143, 189, 253, 749, 752, 756, 866
P. fasciculata	505, 755
P. maritima	510, 754, 757, 759
P. retroflexa	511
P. rupestris	753
P. species	144-161, 163-174, 176-188, 190, 256, 259, 261, 263, 267, 270, 272, 273, 275, 278, 281, 282, 284, 292, 293, 296, 300, 303, 306, 311, 316, 318-321, 336, 477, 762
P. stricta	345, 446
Reaumuria hirtella	209
Rhagodia baccata	448
R. preissii subsp. *obovata*	531
R. species	559, 563, 595
R. spinescens	915
Rhantherium suaveolens	127
Rhigozum obovatum	548, 881
Rumex lunaria	922

Species name	Accession number
Salsola baryosma	237
S. crassa	287, 290, 310
S. dendroides	265
S. incanescens	242
S. lanata	331
S. malcolmii	332
S. nitraria	279
S. rigida	200, 302, 333, 395
S. species	299, 301, 334, 343
S. tetrandra	117, 125
S. tomentosa	308
S. tuberculata	550
S. turcomanica	340
S. vermiculata	113, 208, 396
S. vermiculata var. *villosa*	390
Salvia sonomensis	488, 747
Sarcobatus vermiculatus	19, 26, 39, 56
Scaevola crassifolia	525
S. spinescens	449
Schanginia baccata	383
Simmondsia chinensis	523, 710-713, 780
Sitanion hystrix	25
Sorghum species cv. Brandice	852
S. species cv. Honey	851
S. species cv. Wiley	850
Spartina alterniflora	700, 813
S. patens	699, 704-707, 812
Sporobolus airoides	7, 40, 45, 48, 346, 347, 372, 413, 487
S. marginatus	108
S. species	313, 506, 590
S. virginicus	423, 428, 520, 534, 565
Stipagrostis ciliata	541
S. obtusa	546
Suaeda australis	778
S. fruticosa	103, 214, 355
S. fruticosa, var. *brevifolia*	94, 120
S. fruticosa var. *longifolia*	124
S. monoica	212, 365
S. species	291
S. torreyana	34, 47, 54
S. vera	379
Sutherlandia frutescens	547, 884
Swainsona occidentalis	403
Symonanthus aromaticus	518, 615
Templetonia species	764
Tetragonia arbuscula	204, 349, 486, 542
T. decumbens	527
T. dregei	202, 357
T. fruticosa	880
T. hirsuta	879
Threlkeldia diffusa	519
Traganum nudatum	97, 104
Trifolium fragiferum	112
T. ornithopodioides	814, 819-821
Triglochin maritima	36
Trigonella arabica	192, 835
T. callicuas	834

Species name	Accession number
T. coerulea	830-833
T. corniculata	836
T. cretica	828, 837
T. cylindracea	829
T. faenum graecum	815, 816, 818, 827
T. grandiflora	817
T. noeana	826
T. ornithopodioides	392, 452
T. suavissima	822-825, 904
Uniola paniculata	521
Zygophyllum dumosum	210, 350
Z. species	213, 238

Appendix 3

Index of plant collections by country of origin. Collections received from an intermediary country are shown in brackets. If the country of origin is known, they are recorded under the country of origin, but without brackets.

For example. Collections 711-713, listed under Australia from the State of New South Wales are enclosed in brackets as the original material came from the United States of America. The same collections are listed in the appropriate place under country of origin.

Country (and State)	**Accession number**
Algeria	94-101, 103-106, 113-115, 384-390, 618
Argentina	205, 361, 471, 479, 714, 934-938
Australia	
Australian Capital Territory	358
New South Wales	(711-713), (749), 904-908, 915, 924
South Australia	464, 465, 505, 701, 703, 806, 849, 858, 865
Victoria	702, 847
Western Australia	344, 345, 391-394, 397, 398, 401-407, 409-412, 421-431, 434-444, 446-463, 466-470, 473-478, 480-483, 485, 489-500, 506-509, 512-520, 522, 524-539, 552-615, 617, 620-698, 708, 709, 715, 717-737, 763-779, 781-805, 807-811, 814, 819, 838-840, (841), 842, 845, 846, 857, 859, 862-864, 867, 891, 892, 894-897, 900-903, 909-914, 916-919, 926-928, 930-933, 939-946
Belgium	832
Chile	203, 363, 433, (485), 716, 742, 746, 860, 861
France	762
Hungary	828, 833
Iran	250-343, 616
Iraq	222-227, (228), 229, 231-249
Israel	191-197, (198-201), 202, (203), 204, (205), 206-221, 349-352, (353), 354-356, (357, 358), 359, (360, 361), 362, (363), 364-367, (368), 369-373, (374), 375-383, (395), 396
Lebanon	826
Libya	856
Morocco	432
Netherlands	510, 511, 831
Portugal	834
Russia	198-200, 368, 395, 738, 739, 815-818
South Africa	357, 400, 540-551, 868-890, 893, 898
Spain	750, 751, 920-922
Sweden	837

Country (and State)	Accession number
Tunisia	107-112, 116-143, 201, 374, 414-420, 472, 484, 501, 619, 744, 748, 923
Turkey	144-190
United Kingdom	399, 752-761
United States of America	
Arizona	11-16, 49-75, 780, 925
California	1-7, 76-93, 360, 488, 502-504, 523, 740, 741, 747
Georgia	705-707
Maryland	699, 700
Montana	445
New Jersey	704
New Mexico	27-48, 346-348, 413, 487
North Carolina	521
Not specified	711-713, 749, 812, 813, 841, 850-855, 866
Utah	8-10, 17-26
Unknown	228, 820-825, 827, 829, (831-835), 836, 837, 843, 844
Venezuela	353


Western Australian
Department of
Agriculture