A FLORISTIC SURVEY OF YUCCA MOUNTAIN AND VICINITY
NYE COUNTY, NEVADA

by

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ABSTRACT

A survey of the vascular flora of Yucca Mountain and vicinity, Nye County, Nevada, was conducted from March to June 1994. An annotated checklist of recorded taxa was compiled. Voucher plant specimens were collected and accessioned into the Herbarium at the University of Nevada, Las Vegas. Collection data accompanying these specimens were entered into that herbarium's electronic data base. Combined results from this survey and the works of other investigators reveal the presence of a total of 325 specific and intraspecific taxa within the area, these allocated to 162 genera and 53 families. Owing to drought conditions prevalent throughout the area, the annual floristic component was largely absent during the period of study, and it is likely much under-represented in the tabulation of results.

No taxon currently listed as threatened or endangered under the Endangered Species Act was encountered during this study. Several candidate species for listing under this Act were present, and distributional data for these were recorded. No change in the status of these candidate species is recommended as the result of this survey.

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INTRODUCTION

Yucca Mountain, located, in part, along the southwestern boundary of the U.S. Department of Energy's Nevada Test Site, Nye County, Nevada, is under consideration as a possible location for a national high-level radioactive waste repository. The present study, part of the over-all site characterization process initiated in 1978, supplements previously completed biotic studies and provides site-specific information on the flora of southern Yucca Mountain and contiguous areas.

This floristic survey was conducted from March to June 1994 and covered an area of approximately 150 square miles.

Vegetation of the Yucca Mountain characterization site has been analyzed and described by Collins and O'Farrell (1985) and by O'Farrell and Collins (1983, 1984); and that of the Nevada Test Site by Beatley (1976). Other publications relating to the vegetation and flora of southern Yucca Mountain and vicinity are listed in the REFERENCES section of this report.

Plant lists compiled during this survey provide for a more complete knowledge of the plant resources to be found in the area. Plant specimens collected as part of this study have been accessioned into the Herbarium of the University of Nevada, Las Vegas.

MATERIALS AND METHODS

The flora of the southern Yucca Mountain project area was surveyed on foot between March 1st and June 30th, 1994 by four professional botanists.

Comprehensive plant lists were compiled at one-quarter mile intervals along Yucca Mountain ridge, with personnel walking the east-west width of the crest and adjacent slopes. Similar surveys were conducted elsewhere at selected sites throughout the area; site selection was often dictated by factors of accessibility and anticipated botanical diversity. Owing to the lack of winter moisture, the annual component of the study area's flora was essentially absent, so that this study, by default, was restricted primarily to perennial growth forms.

Plant lists compiled in each area by botanical teams were combined to provide a checklist for that area. In those instances where field plant identification was not possible, specimens were collected for later determination and for addition to the master checklist. Collections were made of plants in flower or fruiting condition, and these have been accessioned into the Herbarium at the University of Nevada, Las Vegas. Collection data accompanying

the specimens have been inserted into the expanding botanical data base being developed.

Plant species of special concern, e.g., those designated as threatened or endangered, or otherwise rare, or of special scientific interest were noted, along with appropriate information regarding occurrence and distribution within the study area. Photographic documentation of these occurrences was made.

A master list of plants surveyed was compiled, as were lists of previously unreported taxa, and those of special concern (see the RESULTS section of this report).

STUDY AREA BOUNDARIES

This floristic study was conducted over approximately 150 square miles. It included the nearly 28 square mile characterization site atop Yucca Mountain; the lower elevation ridges, bajadas, and drainages south of Calico Hills and west of Forty-mile Wash; that northern portion adjacent to the U.S. Air Force Nellis Bombing Range; Bureau of Land Management areas to the north and west (Solitario Canyon, Crater Flat, the eastern slope and canyons of Bare Mountain, Tate and Beatty Washes); and that region south to U.S. highway 93, Steves Pass and Black Marble Mountain.

GEOLOGY

The study area encompasses geology that varies from recent alluvial deposits, to Quaternary and Tertiary volcanics, and Mesozoic and Paleozoic sedimentary and metamorphic rocks. The variety of parent rock substrates and derived soils provides a wealth of ecological opportunities for the many and diverse plant species of the area. The following geologic account has been abstracted from Cornwall (1972).

Bare Mountain is a predominantly limestone-dolomite mountain, oriented in a north-south direction. Several west to east canyons dissect the mountain mass. The high ridges and spurs are commonly sharp and the walls of the canyons are characteristically steep. Bare Mountain is geologically quite complex. The geological complexity has created various mining opportunities. Fluorspar is mined in portions of the Bare Mountain area. In addition, gold, silver, and mercury, as well as volcanic cinders and pumicite, have been extracted from the region.

The geology of the area is described here by geography, detailing the southern section first, then examining the central and finally, the more northerly portions last. Older rock formations tend to outcrop at the southern portion of Bare Mountain, while more recent rocks are exposed in the northern section, so the discussion is

also organized in an oldest to youngest rock order.

Steves Pass (elevation 2,951 feet), is located at the southern boundary of the study area. Three components of the Johnnie (?) formation make up this southern portion of Bare Mountain. The Johnnie (?) formation is of lower Cambrian age and is the oldest and thickest formation in the region, up to 4,800 feet thick. It consists of minor carbonate rock, dolomite and limestone that becomes sandy upward, and a large amount of quartzitic sandstone, silty sandstone, and siltstone. The remainder of the formation is micaceous shale and conglomerate interstratified in zones. The components of the Johnnie (?) formation have commonly undergone low grade metamorphism to form phyllite, schist, quartzite, and marble. Two prominent quartzite units, each approximately 300 feet thick, occur near the middle and top of the formation.

Wildcat Peak (elevation 5,047 feet, Bare Mountain) is comprised mainly of the Stirling quartzite. This lower Cambrian quartzite appears pale red from a distance. An outcrop of the Carrara formation occurs on the ridge east of the peak. This lower Cambrian formation consists of siltstone, quartzite, and sandstone. The lower portion is composed of alternating quartzite, sandstone, siltstone, phyllitic shale, and minor limestone alternating with shale and siltstone. A middle portion is composed of limestone alternating with shale and siltstone. The upper component is a fine-grained limestone which is marbled in places. The first major canyon to the north of Wildcat Peak is mostly of the Bonanza King formation, a middle to late Cambrian, fine-grained, banded dolomite. Parts of this formation contains intercalated silty and sandy layers and some cherty zones. This is the canyon where *Gilia ripleyi* was located.

We did not sample that region of Bare Mountain between the canyon north of Wildcat Peak and Chuckawalla Canyon because of large scale and active mining operations. This complex portion of the mountain consists of the upper Cambrian Nopah formation, the Johnnie(?) formation, the Carrara formation, the Stirling quartzite, the Bonanza King formation, the upper Ordovician Ely Springs dolomite, the lower Ordovician Pogonip group, the middle Silurian Roberts Mountains formation, the Lone Mountain dolomite, and Tertiary and Quaternary porphyry intrusions or flows.

Chuckawalla Canyon, Bare Mountain, has several formations outcropped on its southern ridge. The lower Ordovician Pogonip group is a primarily carbonate formation. The lowest portion is a silty, cherty limestone with cherty dolomite at the base. The uppermost part is shaly limestone interbedded with pure limestone, and grades through a very thin sandy zone into the overlying Eureka quartzite. The middle Ordovician Eureka quartzite typically outcrops as a cliff with thin sandstone units at the bottom and top. The upper Ordovician Ely Springs dolomite is a fine-grained dolomite with anastomosing lenses of chert. Quartzitic sandstone

occurs at the base. The middle Silurian Roberts Mountains formation is a sandy and cherty dolomite at the base, platy limestone and limey dolomite in the middle section, and is dolomite in the upper portion. The upper Silurian Lone Mountain dolomite outcrops here. This is a relatively homogeneous dolomite. VABM Bare Mountain, elevation 6,316 feet, is comprised primarily of Ely Springs dolomite and Eureka quartzite, with some Roberts Mountains formation outcropping on the north side. The northern ridge of Chuckawalla Canyon is Roberts Mountains formation, Lone Mountain dolomite, and Ely Springs dolomite.

Tarantula Canyon, Bare Mountain, has an accumulation of Quaternary alluvium in a large, open basin. The southern ridge at the mouth of the canyon has some middle Devonian Fluorspar Canyon formation, while the majority is Lone Mountain dolomite. The Fluorspar Canyon formation exposed here is a cherty dolomite with lenses of sandstone and dolomite, and a little limestone. The head of this canyon, known as Razorback, has the following formations outcropped, in order from south to north: Eureka quartzite, Pogonip group, and Nopah formation. The late Cambrian Nopah formation consists of a thin basal shale and a thick upper dolomite. The northern ridge consists of the upper Mississippian Meiklejohn formation and Stirling quartzite. The Meiklejohn formation is quite diverse in composition, consisting of siltstone, claystone and shale, with lesser amounts of sandstone, conglomerate, and limestone.

The area at **Specie Spring**, Bare Mountain, is dominated by the Carrara formation.

Secret Pass, elevation 4,966, Bare Mountain, is a continuation of the Meiklejohn formation.

Meiklejohn Peak, Bare Mountain, is comprised of the Pogonip group, Eureka quartzite, Ely Springs dolomite, Roberts Mountains formation, Lone Mountain dolomite, Fluorspar Canyon formation, and Tertiary and Quaternary tuff. The Cenozoic age tuff contains broken crystals and small fragments of pumice, stony rhyolite, and rhyolitic glass in a pumiceous matrix. Most of the tuff is moderately to well lithified, but parts of the youngest tuff are loosely consolidated. The northern boundary of Bare Mountain, with respect to this study, occurs at Bates Wash and Joshua Hollow, areas of alluvial accumulation.

The **Beatty Wash** area that was studied consisted of widespread amounts of Tertiary and Quaternary tuff and welded tuff. The welded rhyolitic tuff is predominately stony. Interspersed are smaller amounts of Tertiary and Quaternary porphyry intrusions or flows, some of which are glassy. Quaternary alluvium accumulates in the bottom of Beatty Wash throughout its length.

Crater Flat is a vast, relatively flat expanse that drains

generally southward. Quaternary alluvium makes up over 90% of this area, but it is disrupted by the basalt found at the Black, Red, and Little Cones, and at a few other locations. This material is derived from porphyritic basalt flows, dikes, and cinder cones. The cinder cones in the Crater Flat area are distinctive volcanic features that are Quaternary in age and that have not been appreciably modified by erosion since their formation.

Yucca Mountain is a volcanic mass in the form of a mesa. It is made up of mostly welded tuff. Fairly large amounts of tuff also outcrop. Northern Yucca Mountain has small outcrops of porphyry intrusions or flows, some of which are glassy. The same Tertiary volcanics make up Busted Butte. This area is not nearly as severely faulted as the Bare Mountain portion of the study area.

Fortymile Wash, which forms the eastern boundary of the study area, consists of Quaternary alluvium.

The geological structural history of the Bare Mountain-Yucca Mountain area is complex and of long duration. The principal deformations were folding in the mid to late Paleozoic, intense thrust faulting and lateral faulting in the Mesozoic, moderate thrust and normal faulting in the mid to late Tertiary and, finally, normal faulting from the late Tertiary to Recent.

VEGETATION

Vegetation of the nearly 28 square mile characterization site atop Yucca Mountain has been both qualitatively and quantitatively described in several publications (O'Farrell and Collins, 1983, 1984; Collins and O'Farrell, 1985), and that of the Nevada Test Site by Beatley (1976). These studies serve as the basis for the present discussion.

In Beatley's analysis, plant communities were initially divided by physiographic province: Mojave Desert and Great Basin Desert. The Yucca Mountain area, as represented in the southwestern portion of the Nevada Test Site, contains primarily Mojave Desert plant communities.

The Mojave Desert vegetation is described using physiographic features. These include bajadas, mountains, arroyos (washes), and springs and seeps. Other plant communities of the Nevada Test Site are classified as transitional between the two North American Deserts.

Bajadas. Creosote-bush (*Larrea tridentata*) is a dominant shrub of the bajadas or gentle slopes forming benches above the valley floors, extending to the base of the steeper mountain slopes. These are generally below 4,000 feet in elevation. The bajadas support mosaics of communities with various codominants and

associated species. Creosote-bush's dominant status is usually based on its size. Its canopy nearly always occupies the upper layer of the two-layered shrub communities, although it may occur in low numbers and with low percentage cover in relation to other shrub species.

Over most of the study area, *Ambrosia dumosa* (bur-sage), *Lycium andersonii* (desert-thorn), *Grayia spinosa* (hop-sage), and *Atriplex confertifolia* (shadscale) are the usual codominants, and their degree of representation in the communities appears to be under the major controls of climate and/or physical properties of the soils.

Where soils are deep, loose sands without a surface pavement, a plant association in which *Larrea* and *Ambrosia dumosa* are the dominants reaches its best development. Other associates in this community are *Lycium shockleyi* (Shockley's desert-thorn), *Ephedra torreyana* (Mormon-tea), and *Stipa hymenoides* (Indian ricegrass). In the project area, this prevailing vegetation exists along the southern edge in the northern Amargosa Valley, extending north to Yucca Mountain and west to Steves Pass, through the southern Crater Flat area.

Communities of higher elevations (3,500 to 4,000 feet) and rocky soils with a surface pavement and without a hardpan near the surface usually have as their dominants *Larrea*, *Lycium andersonii*, (Anderson's desert-thorn), and *Grayia spinosa*. In these areas *Ambrosia dumosa* distribution varies and *Haplopappus cooperi* (goldenweed) may increase to become a conspicuous element of the community. *Yucca brevifolia* (Joshua-tree) is sporadic within this community and is conspicuous where it does occur.

Within the study area this community is widespread, forming the major component of the low elevation vegetation above the *Larrea-Ambrosia* community. It is represented along the base of Bare and Yucca Mountains, northern Crater Flat, and the shoulders of Beatty Wash.

On the bajadas, as described by Beatley, communities in which *Larrea* and *Atriplex confertifolia* are consistent dominants cover a major portion of the Mojave area. This is related to the calcareous soil materials originating in the limestone-dolomite mountain ranges and foothills. Here the surface pavement is usually well developed, and the soil matrix is generally fine-textured; there is also a hardpan layer (caliche) near the surface.

These bajada communities are regionally those with the greatest floristic diversity. In most communities, *Psoralea fremontii* (indigo-bush), *Eriogonum fasciculatum* (buckwheat), and *Krameria parvifolia* (range ratany) are prominently represented. In certain ones a Mormon-tea is present (*Ephedra nevadensis* or *Ephedra funerea*), both of which have highly restricted and only slightly overlapping distributions. *Yucca schidigera* (Mojave yucca) occurs

within this community. *Opuntia ramosissima* (pencil cactus) is only reported. *Opuntia basilaris* (beavertail cactus), the most widely distributed cactus in the region, is frequent in these areas.

Mountains. The Yucca and Bare Mountain areas are very diverse geologically, but generally support similar plant communities. The mountains, as described by Beatley, in the Mojave region extend up to an elevation of 6,000 feet. The mountains in this area are extremely rugged, with active, steep slopes often composed of loose talus material. In these steep areas, perennial plants have not been able to become established, resulting in large areas barren of perennial vegetation.

A large total number of species are known from these mountains, but the one that occurs throughout the mountainous area is *Atriplex confertifolia*. The vegetation has therefore been classified as *Atriplex* because this is the unifying, if often inconspicuous, species of the limestone-dolomite ranges, and not because it is necessarily the common shrub present. Most of the species listed previously for the *Larrea-Atriplex* communities of the bajadas below these ranges also occur in the mountains above.

There is a noticeable increase in the herbaceous component of the vegetation in the mountainous areas. Plant diversity and perennial grass cover increase on the mountain slopes. This may simply be an indicator of reduced burro and domestic livestock activity in these areas.

Arroyos. Plants of the arroyos (washes) are generally those found on the surrounding bajadas, but there are also those which are restricted to these environments. Dry mountain canyons and desert washes characterize this habitat. Two rabbitbrushes (*Chrysothamnus paniculatus* and *Chrysothamnus nauseosus*), and *Atriplex polycarpa* (saltbush) are common in many drainages. Also, *Ambrosia eriocentra* (woolly bursage), *Salazaria mexicana* (bladder-sage), *Fallugia paradoxa* (Apache-plume), and *Prunus fasciculata* (desert-almond) occur in these areas. *Tamarix ramosissima* (salt-cedar) is well established in Fortymile Wash and Beatty Wash and many of the other smaller drainages.

Springs and Seeps. Most of Beatley's analysis of the riparian communities is based on the Ash Meadows area of Nevada located to the south, but two spring/seep locations were included in the study area. Specie Spring, located in Tarantula Canyon, supports *Salix lasiolepis* (arroyo willow), *Baccharis emoryi* (seepwillow), *Forestiera neomexicana* (desert-olive), *Rhus trilobata* (squawbush), and *Brickellia microphylla* (little leaf brickell-bush). Two small ponds, representing overflow from a drilled, active well in Fortymile Wash have, at their edges, *Tamarix ramosissima* (salt-cedar), *Typha latifolia* (cat-tail), and a sedge (*Carex praegracilis*).

THREATENED/ENDANGERED SPECIES

There are a number of plants occurring in the study area that are candidates for listing under the Endangered Species Act. However, no plants currently listed as threatened or endangered were located in the area. Candidate plants include: *Lathyrus hitchcockianus* (Hitchcock's pea), the cactus *Sclerocactus polyancistris*, and *Gilia ripleyi* (Ripley's gilia).

The distribution and status of these candidate species was illustrated by Beatley (1977), Rhoads and Williams (1977), and by Rhoads, Cochrane and Williams (1978, 1979). These works contain detailed discussion on the biology of these species and are not restated here.

Additional locations for some of these candidate species are recorded in the checklist portion of this report. Based on this study, no change is recommended in the status of these species under the Endangered Species Act.

Figure 1. View westward from near the base of Yucca Mountain, showing the mixed shrub vegetation of Creater Flat (*Larrea tridentata*, *Lycium andersonii*, and *Grayia spinosa* dominants). Bare Mountain is in the background.

Figure 2. View eastward from Bare Mountain, overlooking Crater Flat. Yucca Mountain ridge in in the background

RESULTS

ANNOTATED CHECKLIST OF THE VASCULAR PLANTS OF YUCCA MOUNTAIN AND VICINITY

In the checklist that follows, families are arranged in alphabetical order under the major subdivisions, as are also the genera and species within each family. Nomenclature follows Kartesz (1994), Welsh et al. (1993), Hickman (1993) and Flora of North America Editorial Committee (1993). Common names are provided where available.

Three primary sources of information were used in compiling the checklist. These include: Beatley (1977), Collins and O'Farrell (1985), O'Farrell and Collins (1983), O'Farrell and Collins, (1984), and fieldwork conducted as part of this project. These sources are represented in this checklist by JCB, O&C and UNLV, respectively.

Plant occurrences are recorded by location. Both observations and collections are included. Collections made as part of this study are indicated by "UNLV-C" and are deposited in the UNLV Herbarium. Noteworthy collections representing taxa new to the area are indicated by an "*".

Division POLYPODIOPHYTA Ferns

Pteridaceae Maidenhair Fern Family

Cheilanthes

Cheilanthes covillei Maxon Coville's lipfern
Chuckwalla Canyon (UNLV-C).

Cheilanthes feei T. Moore Slender lipfern
Tarantula Canyon (UNLV-C).

Cheilanthes parryi (D.C. Eaton) Domin Parry's clockfern
[=*Notholaena parryi* D. C. Eaton]
Bare Mtn. (UNLV), Black Marble Mtn. (UNLV), Chuckwalla Canyon (UNLV-C),
Crescent Cliff (UNLV), canyon north of Wildcat Peak (UNLV-C).

Pellaea

Pellaea mucronata (D. C. Eat.) D. C. Eat. in Emory Spiny cliff-brake
ssp. *mucronata*
Yucca Mtn. (JCB).

Pellaea truncata Goodd.
Below Yucca Mtn. (JCB).

Pentagramma

Pentagramma triangularis (Kaulf.) Yatakievych, Windham & E. Wollenweber
ssp. *triangularis*
[=*Pityrogramma triangularis* (Kaulf.) Maxon Goldback fern
var. *triangularis*]
Specie Spring (UNLV-C), Crescent Cliff (UNLV), Beatty Wash (UNLV).

Division GNETOPHYTA Gnetophytes

Ephedraceae Mormon-tea or Joint-fir Family

Ephedra

Ephedra funerea Cov. & Mort. Death Valley ephedra

[=E. californica S. Wats.
var. funerea (Cov. & Mort.) L. Benson]
Steves Pass(UNLV), Black Marble Mtn.(UNLV-C), Crater Flat(UNLV),
Tates Wash(UNLV), Busted Butte(UNLV), canyon north of Wildcat
Peak(UNLV).

Ephedra nevadensis S. Wats. Nevada ephedra
Crater Flat(UNLV), Chuckwalla Canyon(UNLV), Specie Spring(UNLV),
Flourspar Canyon(UNLV), Tates Wash(UNLV), Crescent Cliff(UNLV),
Tarantula Canyon(UNLV), Yucca Mtn.(O&C, UNLV), Busted Butte(UNLV),
Forty-Mile Wash(UNLV), Solitario Canyon(UNLV), canyon north of
Wildcat Peak(UNLV).

Ephedra viridis Cov. Green ephedra
Chuckwalla Canyon(UNLV), Specie Spring(UNLV), Flourspar
Canyon(UNLV), Tates Wash(UNLV), Crescent Cliff(UNLV), Tarantula
Canyon(UNLV), Yucca Mtn.(O&C, UNLV), Busted Butte(UNLV), Solitario
Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Division MAGNOLIOPHYTA Angiosperms

Class MAGNOLIATAE Dicotyledons

Amaranthaceae Amaranth Family

Amaranthus

Amaranthus californicus (Moq.) S. Wats. California amaranth
[=Mengea californica Moq.]
Forty-Mile Canyon Wash(JCB).

Tidestromia

Tidestromia oblongifolia (S. Wats.) Standl.
var. oblongifolia
[=Cladothrix oblongifolia Wats.]
Canyon north of Wildcat Peak(UNLV).

Anacardiaceae Sumac Family

Rhus

Rhus trilobata Nutt. ex Torr. & Gray Skunkbush, squawbush
var. anisophylla (Greene) Jeps.
[=Rhus aromatica Ait.]
var. trilobata (Nutt.) Gray]
Specie Spring(UNLV-C).

Apiaceae (Umbelliferae) Carrot Family

Lomatium

Lomatium nevadense (S. Wats.) Coult. & Rose Nevada lomatium
var. nevadensis
[=Peucedanum nevadense Wats.]
Crescent Cliff(UNLV-C), Tates Wash(UNLV-C), Yucca Mtn.(O&C).

*Lomatium parryi (Wats.) Macbr. Parry's lomatium
[=Peucedanum parryi Wats.]
Specie Spring(UNLV-C).

Asclepiadaceae Milkweed Family

Asclepias

Asclepias erosa Torr. Desert milkweed

[=A. leucophylla Engelm. in Parry]
Solitario Canyon(UNLV).

Asteraceae (Compositae) Sunflower Family

Acamptopappus

Acamptopappus shockleyi A. Gray
Steves Pass(UNLV), Crater Flat(UNLV), Chuckwalla Canyon(UNLV-C),
Yucca Mtn. (O&C), Busted Butte(UNLV), Forty-Mile Wash(UNLV), Beatty
Wash(UNLV), Solitario Canyon(UNLV).

Ambrosia

Ambrosia acanthicarpa Hook. Bur ragweed
[=Franseria acanthicarpa (Hook.) Cov.]
Amargosa Valley(JCB).

Ambrosia dumosa (A. Gray) Payne Burro-weed, bursage
[=Franseria dumosa Gray]
Crater Flat(UNLV), Steves Pass(UNLV), Black Marble Mtn.(UNLV),
Crater Flat(UNLV), Bates Wash(UNLV), Chuckwalla Canyon(UNLV), Yucca
Mtn.(O&C,UNLV), Busted Butte(UNLV), Forty-Mile Wash(UNLV), Beatty
Wash(UNLV), Solitario Canyon(UNLV), canyon north of Wildcat
Peak(UNLV).

Ambrosia eriocentra (A. Gray) Payne Wooly bursage
[=Franseria eriocentra Gray]
Forty-Mile Wash(UNLV), Beatty Wash(UNLV).

Amhipappus

Amhipappus fremontii Torr. & Gray Chaff-bush
Black Marble Mtn.(UNLV), Busted Butte(UNLV), canyon north of Wildcat
Peak (UNLV).

Artemisia

Artemisia bigelovii A. Gray Bigelow's sagebrush
Tarantula Canyon(UNLV), Chuckwalla Canyon(UNLV), Beatty
Wash(UNLV).

Artemisia dracunculus L. Tarragon
[=A. aromatica A. Nels;
A. dranunculoides Pursh]
Specie Spring(UNLV), Crescent Cliff(UNLV).

Artemisia ludoviciana Nutt.
ssp. incompta (Nutt.) Keck
[=A. incompta (Nutt.) Keck]
Chuckwalla Canyon(UNLV), Specie Spring(UNLV), Crescent
Cliff(UNLV), Tarantula Canyon(UNLV), Beatty Wash(UNLV), Solitario
Canyon(UNLV).

Artemisia nova A. Nels Black sagebrush
[=A. tridentata ssp. nova (A. Nels.) H. & C.
A. arbuscula ssp. nova (A. Nels.) G. Ward]
Chuckwalla Canyon(UNLV).

Artemisia spinescens D. C. Eat. Budsage
[=Picrothamnus desertorum Nutt.]
Fluorspar Canyon(UNLV), Bates Wash(UNLV-C), Yucca Mtn.(O&C,UNLV),
Busted Butte(UNLV), Beatty Wash(UNLV), Solitario Canyon(UNLV).

Artemisia tridentata Nutt. Big sagebrush
var. tridentata
[=Serphidium tridentatum (Nutt.) W.A. Weber]
Fluorspar Canyon(UNLV), Tate's Wash(UNLV), Chuckwalla Canyon(UNLV),
Beatty Wash(UNLV).

Baileya

Baileya pleniradiata Harv. & Gray in Emory
Forty-Mile Wash(UNLV), Yucca Mtn.(O&C).

Bebbia

Bebbia juncea (Benth.) Greene Chuckwalla's delight, sweetbush
[=Carphephorus juncea Benth.]
Yucca Mtn.(UNLV), canyon north of Wildcat Peak(UNLV-C).

Brickellia

Brickellia arguta Rob.
Busted Butte(JCB), canyon north of Wildcat Peak(UNLV).

Brickellia californica (Torr. & Gray) A. Gray California brickell-bush
[=Bulbostylis californica T. & G.
Coleosanthus californicus (T. & G.) Kuntze]
Busted Butte(UNLV).

Brickellia desertorum Cov. Brickell-bush
Bare Mtn.(JCB), Busted Butte(UNLV), canyon north of Wildcat
Peak(UNLV).

Brickellia longifolia S. Wats. Longleaf brickell-bush
[=Coleosanthus longifolia (Wats.) Kuntze]
Crescent Cliff(UNLV), Chuckwalla Canyon(UNLV), Beatty Wash(UNLV).

Brickellia microphylla (Nutt.) A. Gray Rough brickell-bush
[=Bulbostylis microphyllus Nutt.]
Bare Mtn.(JCB), N. Yucca Mtn.(JCB), Specie Spring(UNLV), Fluorspar
Canyon(UNLV), Tate's Wash(UNLV), Yucca Mtn.(UNLV), Busted
Butte(UNLV), Chuckwalla Canyon(UNLV), Beatty Wash(UNLV), Solitario
Canyon(UNLV).

Brickellia multiflora Kell.
Bare Mtn.(JCB), North Yucca Mtn.(JCB).

Brickellia oblongifolia Nutt. Mojave brickell-bush
var. linifolia (D. C. Eat.) Rob.
Forty-Mile Canyon drainage(JCB).

Brickellia watsonii Rob.
Bare Mtn.(JCB), North Yucca Mtn.(JCB).

Calycoseris

Calycoseris wrightii A. Gray Pale tackplant
Beatty Mtn.(JCB), Yucca Mtn. (O&C).

Chaenactis

Chaenactis carphoclinia A. Gray Pebble pincushion
Bare Mtn.(JCB), Yucca Mtn.(O&C).

Chaenactis fremontii A. Gray Desert pincushion
Below Bare Mtn.(JCB), Crater Flat(JCB), Yucca Mtn.(O&C,UNLV), Busted
Butte(UNLV), Chuckwalla Canyon(UNLV).

Chaenactis stevioides Hook. & Arn. Stevia dusty-maiden
Fluorspar Canyon(JCB), Bates Wash(JCB), Beatty Wash(UNLV-C).

Chaenactis xantiana A. Gray
Below North Yucca Mtn.(JCB), Beatty Wash(JCB), Yucca Mtn.(UNLV-C).

Chrysothamnus

Chrysothamnus nauseosus (Pall.) Britton Rubber rabbitbrush
ssp. hololeucus (A. Gray) Hall & Clem.
Yucca Mtn.(JCB), Bare Mtn.(JCB).

Chrysothamnus nauseosus (Pall.) Britton
ssp. leiospermus (A. Gray) Hall & Clem.
[=Bigelovia leiosperma Gray;
Bigelovia leiosperma Gray var. abbreviata Jones;
C. nauseosus (Pall.) Britton var. abbreviata (Jones) Welsh]
Bare Mtn.(JCB), Yucca Mtn.(JCB), Crater Flat(UNLV), Fluorspar
Canyon(UNLV), Bates Wash(UNLV), Crescent Cliff(UNLV), Tarantula
Canyon(UNLV), Chuckwalla Canyon(UNLV), Yucca Mtn.(UNLV), Beatty
Wash(UNLV), Solitario Canyon(UNLV), canyon north of Wildcat
Peak(UNLV).

Chrysothamnus paniculatus (A. Gray) Hall Mojave rabbitbrush
[=Bigelovia paniculata Gray;
Chrysothamnus oliganthus A. Nels.]
Below Bare Mtn.(JCB), Chuckwalla Canyon(JCB,UNLV), Tarantula
Canyon(JCB,UNLV), Forty-Mile Wash(UNLV), Beatty Wash(UNLV), canyon
north of Wildcat Peak(UNLV).

Chrysothamnus teretifolius (Dur. & Hilg.) Hall
Bare Mtn.(JCB), Chuckwalla Canyon(UNLV), Fluorspar Canyon(UNLV),
Bates Wash(UNLV), Crescent Cliff(UNLV), Tarantula Canyon(UNLV),
Yucca Mtn.(O&C,UNLV), Busted Butte(UNLV), Beatty Wash(UNLV),
Solitario Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Chrysothamnus viscidiflorus (Hook.) Nutt. Yellow rabbitbrush
ssp. stenophyllus (A. Gray) Hall & Clem.
[=Bigelovia douglasii var. stenophylla Gray;
C. viscidiflorus var. stenophylla (Gray) H. & C.;
C. viscidiflorus var. axillaris (Keck) L. C. Anderson;
C. axillaris Keck]
Fluorspar Canyon(UNLV), Bates Wash(UNLV), Crescent Cliff(UNLV),
Tarantula Canyon(UNLV), Yucca Mtn.(O&C,UNLV), Chuckwalla
Canyon(UNLV), Beatty Wash(UNLV).

Cirsium

Cirsium neomexicanum A. Gray New Mexico thistle
Chuckwalla Canyon(UNLV-C), Specie Spring(UNLV), Bates Wash(UNLV),
Crescent Cliff(UNLV), Beatty Wash(UNLV), Solitario Canyon(UNLV).

Conyza

Conyza canadensis (L.) Cronq. Horseweed
[=Erigeron canadensis (L.) Cronq.]
Forty-Mile Wash(UNLV).

Encelia

Encelia farinosa A. Gray Incienso,
Northern Amargosa Valley(JCB). brittlebush

Encelia frutescens A. Gray Bush encelia
var. frutescens
[=Simsia frutescens Gray;

E. frutescens var. resinosa Jones]
Northern Amargosa Valley(JCB).

Encelia virginensis A. Nels.

ssp. actoni (Elmer) Keck

[=E. frutescens var. virginensis (A. Nels.) Blake]

Northern Bare Mtn.(JCB), West Crater Flat(JCB), Yucca Mtn.(O&C).

Encelia virginensis A. Nels.

ssp. virginensis

[=E. frutescens var. virginensis (A. Nels.) Blake]

Northern Amargosa Valley(JCB), Black Marble Canyon(UNLV), Crater Flat(UNLV), Chuckwalla Canyon(UNLV), Specie Spring(UNLV), Fluorspar Canyon(UNLV), Tates Wash(UNLV), Tarantula Canyon(UNLV), Yucca Mtn.(UNLV), Busted Butte(UNLV), Forty-Mile Wash(UNLV), Beatty Wash(UNLV-C), Solitario Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Eriophyllum

Eriophyllum pringlei A. Gray

Forty-Mile Wash(UNLV), Yucca Mtn.(O&C).

Gutierrezia microcephala (DC.) A. Gray

Snakeweed

[=Bachyris microcephala C.;

G. sarothrae var. microcephala (DC.) L. Benson;

Xanthocephalum microcephalum (DC) Shinn.]

Bare Mtn.(JCB), North Crater Flat(UNLV), Chuckwalla Canyon(UNLV), Tarantula Canyon(UNLV), Specie Spring(UNLV), Tates Wash(UNLV), Crescent Cliff(UNLV), Yucca Mtn.(O&C,UNLV), Busted Butte(UNLV), Beatty Wash(UNLV), Solitario Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Haplopappus

Haplopappus brickelloides Blake

[=Hazardia brickelloides (S.F. Blake) W. Clark]

Bare Mtn.(JCB), Black Marble Mtn.(UNLV), Chuckwalla Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Haplopappus cooperi (A. Gray) Hall

[=Ericameria cooperi (Gray) Hall]

Crater Flat(JCB), North Crater Flat(UNLV), Chuckwalla Canyon(UNLV), Fluorspar Canyon(UNLV), Tates Wash(UNLV), Crescent Cliff(UNLV), Forty-Mile Wash(UNLV-C), Yucca Mtn.(O&C,UNLV-C), Busted Butte(UNLV), Beatty Wash(UNLV), Solitario Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Haplopappus cuneatus A. Gray

[=Ericameria cuneata (A. Gray) McClatchie]

Specie Spring(UNLV), Crescent Cliff(UNLV), Chuckwalla Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Haplopappus linearifolius DC.

Interior goldenbush

[=Ericameria linearifolia (DC.) Urb. & Wussow]

Northern Bare Mtn.(JCB), Northern Yucca Mtn.(JCB), Specie Spring(UNLV-C), Fluorspar Canyon(UNLV), Tates Wash(UNLV), Crescent Cliff(UNLV), Yucca Mtn.(O&C,UNLV), Chuckwalla Canyon(UNLV), Beatty Wash(JCB,UNLV), Solitario Canyon(UNLV).

Hymenoclea

Hymenoclea salsola Torr. & Gray

Burrobush

Northern Amargosa Valley(JCB), Crater Flat(UNLV), Chuckwalla

Canyon(UNLV), Tarantula Canyon(UNLV), Specie Spring(UNLV), Fluorspar Canyon(UNLV), Bates Wash(UNLV), Yucca Mtn.(O&C,UNLV), Busted Butte(UNLV), Forty-Mile Wash(UNLV-C), Solitario Canyon(UNLV).

Machaeranthera

Machaeranthera canescens (Pursh) A. Gray Hoary-aster
[=Aster canescens Pursh]
Northwest Yucca Mtn.(JCB), Bates Wash(UNLV), Forty-Mile Wash(UNLV-C)
Yucca Mtn.(O&C,UNLV), Busted Butte(UNLV), Beatty Wash(UNLV),
Solitario Canyon(UNLV).

Machaeranthera tortifolia (A. Gray) Cronq. & Keck Mojave-aster
var. tortifolia
[=Xylorhiza tortifolia (T. & G.) Greene;
Aster abatus Blake;
Haplopappus tortifolius T. & G.;
Xylorhiza lanceolata Rydb.]
Black Marble Canyon(UNLV), Bates Wash(UNLV), Yucca Mtn.(O&C,UNLV-C),
Busted Butte(UNLV), Beatty Wash(UNLV), Solitario Canyon(UNLV),
canyon north of Wildcat Peak(UNLV).

Malacothrix

Malacothrix glabrata A. Gray Desert-dandelion
[=Malacothrix californica
var. glabrata D.C. Eaton]
Yucca Mtn.(JCB,O&C,UNLV), Chuckwalla Canyon(UNLV), Beatty
Wash(UNLV).

Malacothrix sonchoides (Nutt.) Torr. & Gray
[=Leptoseris sonchoides Nutt.]
Beatty Wash(JCB), Yucca Mtn.(O&C).

Microseris

Microseris linearifolia (Nutt.) Sch.-Bip. Silver-puffs
[=Microseris lindleyi (DC.) Gray;
Calais lindleyi DC.;
Uropappus linearifolius Nutt.;
Stebbinsoseris heterocarpa (Nutt.) Chambers]
Beatty Wash(UNLV-C).

Monoptilon

Monoptilon bellidiforme T. & G. ex Gray Desert-star
Chuckwalla Canyon(UNLV), Solitario Canyon(UNLV).

Perityle

Perityle intricata (Brandeg.) Shinnars
[=Perityle megaloccephala (S. Wats.) J.F. Macbr.;
var. oligophylla (Brandeg.) Keck;
Laphamia megaloccephala S. Wats.;
var. intricata (Brandeg.) Keck]
Canyon north of Wildcat Peak(UNLV-C).

Perityle megaloccephala (S. Wats.) Macbr.
var. megaloccephala
Black Marble Mtn.(UNLV).

Peucephyllum

Peucephyllum schottii (A. Gray) A. Gray Pygmy-cedar
[=Psathyrotes schottii Gray]
Canyon north of Wildcat Peak(UNLV).

Prenanthes

Prenanthes exigua (A. Gray) Rydb.
[=*Prenanthes exigua* Gray;
Lygodesmia exigua (Gray) Gray]
North Amargosa Valley(JCB), Yucca Mtn.(O&C).

Rafinesquia

Rafinesquia neomexicana A. Gray Desert-chicory
South Crater Flat(JCB), Yucca Mtn.(O&C).

Senecio

Senecio douglasii DC. Douglas' groundsel
var. *monoensis* (Greene) Jeps.
[=*S. flaccidus* Less
var. *monoensis* (Greene) Turner & Barkley]
Yucca Mtn.(JCB), Bates Wash(UNLV-C), Chuckwalla Canyon(UNLV), Busted
Butte(UNLV), canyon north of Wildcat Peak(UNLV).

Senecio multilobatus Torr. & Gray ex Gray Groundsel
[=*S. lapidum* Greenman]
Yucca Mtn.(JCB), Beatty Wash(JCB).

Stephanomeria

Stephanomeria parryi A. Gray Parry's-wirelettuce
Yucca Mtn.(UNLV-C).

Stephanomeria pauciflora (Torr.) Nutt. Wirelettuce
var. *parishii* (Jepson) Munz
[=*Prenanthes pauciflora* Torr.]
Northern Amargosa Valley(JCB), Crater Flat(UNLV), Chuckwalla
Canyon(UNLV), Bates Wash(UNLV), Crescent Cliff(UNLV), Yucca
Mtn.(O&C,UNLV), Busted Butte(UNLV), Forty-Mile Wash(UNLV), Beatty
Wash(UNLV), Solitario Canyon(UNLV-C), canyon north of Wildcat
Peak(UNLV).

Stylocline

Stylocline micropoides A. Gray Desert nest-straw
Specie Spring(UNLV), Crescent Cliff(UNLV), Beatty Wash(UNLV),
Yucca Mtn.(O&C).

Syntrichopappus

Syntrichopappus fremontii A. Gray
Fluorspar Canyon(UNLV-C), Bates Wash(UNLV), Yucca Mtn.(O&C,UNLV),
Beatty Wash(UNLV), Solitario Canyon(UNLV).

Tetradymia

Tetradymia axillaris A. Nels. Longspine horsebrush
Chuckwalla Canyon(UNLV), Fluorspar Canyon(UNLV), Bates Wash(UNLV),
Tarantula Canyon(UNLV), Yucca Mtn.(O&C,UNLV-C), Busted Butte(UNLV),
Beatty Wash(UNLV), Solitario Canyon(UNLV).

Tetradymia glabrata T. & G. Littleleaf horsebrush
Bates Wash(UNLV), Crescent Cliff(UNLV), Tarantula Canyon(UNLV),
Beatty Wash(UNLV-C), Solitario Canyon(UNLV).

Viguiera

Viguiera reticulata S. Wats.
Crater Flat(UNLV), Chuckwalla Canyon(UNLV), Tarantula Canyon(UNLV),
Beatty Wash(UNLV), canyon north of Wildcat Peak(UNLV-C).

Boraginaceae Borage Family

Amsinckia

- Amsinckia tessellata A. Gray Rough fiddleneck
 [= A. collina Greene;
A. pustulata Heller;
A. conica Suksd.;
A. utahensis Suksd.]
 Crater Flat (UNLV), Chuckwalla Canyon (UNLV), Tates Wash (UNLV), Yucca Mtn. (O&C, UNLV-C), Beatty Wash (UNLV), Solitario Canyon (UNLV).

Coldenia

- Coldenia nuttallii Hook.
 [= Tiquilia nuttallii (Hook.) Richards.]
 Red Cinder Cone (South Yucca Mtn.) (JCB).
Coldenia plicata (Torr.) Cov.
 [= Tiquilia plicata (Torrey) A. Richards.]
 Busted Butte (UNLV).

Cryptantha

- Cryptantha angustifolia (Torr.) Greene Narrowleaf cryptanth
 [= Eritrichium angustifolium Torr;
Krynitzkia angustifolia Gray]
 Bare Mtn. Area of North Yucca Mtn. (JCB), Chuckwalla Canyon (UNLV), Yucca Mtn. (O&C).
Cryptantha circumscissa (Hook. & Arn.) Jtn. Opening cryptanth
 [= Lithospermum circumscissum H. & A.;
Cryptantha depressa A. Nels.]
 Below North Yucca Mtn. (JCB), Yucca Mtn. (UNLV), Beatty Wash (UNLV).
Cryptantha decipiens (M. E. Jones) Heller Beguiling cryptanth
 [= Krynitzkia decipens Jones]
 Beatty Wash (JCB).
Cryptantha dumetorum (Greene ex Gray) Greene Greene cryptanth
 [= Krynitzkia dumetorum Greene]
 Busted Butte (UNLV), Beatty Wash (JCB).
Cryptantha flavoculata (A. Nels.) Pays. Yellow-eye cryptanth
 [= Oreocarya flavoculata A. Nels.]
 Chuckwalla Canyon (UNLV-C), Tarantula Canyon (UNLV).
Cryptantha maritima (Greene) Greene Dye cryptanth
 [= Eritrichium micranthum Torr.;
Eremocarya muricata Rydb.]
 Yucca Mtn. (JCB), Bare Mtn. (JCB).
Cryptantha nevadensis Nels. & Kenn. Nevada cryptanth
 var. nevadensis
 [= Cryptantha leptophylla Rydb.]
 Crescent Cliff (UNLV), Northern Amargosa Valley (JCB), Yucca Mtn. (O&C).
Cryptantha pterocarya (Torr.) Greene Wing-nut cryptanth
 [= Eritrichium pterocaryum Torr.;
Eritrichium pterocaryum var. pectinatum Gray]
 Yucca Mtn. (O&C, UNLV), Busted Butte (UNLV-C), Beatty Wash (UNLV-C).
Cryptantha racemosa (S. Wats.) Greene
 [= Eritrichium racemosum Wats.]

Canyon north of Wildcat Peak(UNLV).

Cryptantha recurvata Cov. Recurved cryptanth
Crater Flat(JCB).

Cryptantha utahensis (A. Gray) Greene Utah cryptanth
[=Krynitzkia utahensis Gray;
Eritrichium holopterum var. submolle Gray]
Beatty Wash(JCB).

Pectocarya

Pectocarya heterocarpa (Jtn.) Jtn. Combseed
[=P. penicillata var. heterocarpa Johnston]
Northern Amargosa Valley(JCB), Yucca Mtn.(O&C).

Pectocarya platycarpa (Munz & Jtn.) Munz & Jtn. , Flattened combseed
[=Pectocarya gracilis var. platycarpa Munz & Johnston]
Specie Spring(UNLV-C), Bare Mtn.(JCB), Beatty Wash(JCB).

Pectocarya recurvata Jtn. Bent combseed
Yucca Mtn.(O&C,UNLV-C), Solitario Canyon(UNLV).

Pectocarya setosa A. Gray Saucer combseed
[=Pectocarya setosa var. aperta Johnston;
Pectocarya setosa var. holoptera Johnston;
Gruvelia setosa (Gray) Rydb.]
Yucca Mtn.(JCB,O&C,UNLV-C), Chuckwalla Canyon(UNLV-C), Beatty
Wash(UNLV), Solitario Canyon(UNLV).

Plagiobothrys

Plagiobothrys arizonicus (A. Gray) Greene ex Gray Stainplant
[=Eritrichium canescens var. arizonicum Gray]
Specie Spring(UNLV-C), Tates Wash(UNLV).

Plagiobothrys jonesii (A. Gray) A. Gray Popcornflower
[=Sonnea jonesii (Gray) Greene]
Bare Mtn.(JCB), Beatty Wash(JCB), Busted Butte(UNLV).

Brassicaceae (Cruciferae) Mustard Family

Arabis

Arabis perennans S. Wats. Common rockcress
[=Boecher perennans (Wats.) W. A. Weber;
A. arcuata var. perennans (Wats.) Jones;
A. gracilentia Greene;
A. recondita Greene;
A. angulata Greene ex Woot. & Standl.;
A. falactoria Rollins]
Specie Spring(UNLV-C). Tates Wash(UNLV), Tarantula Canyon(UNLV),
Chuckwalla Canyon(UNLV-C).

Arabis pulchra M. E. Jones Rockcress
var. munciensis M. E. Jones
North Yucca Mtn.(JCB), Fluorspar Canyon(UNLV), Yucca Mtn.(O&C).

Caulanthus

Caulanthus cooperi (S. Wats.) Pays.
[=Thelypodium cooperi Wats;
Guillenia cooperi (Wats.) Greene]
Crater Flat(JCB), Yucca Mtn.(O&C).

Caulanthus lasiophyllus (Hook. & Arn.) Pays.

var. utahensis (Rydb.) Pays.
[=Turritis lasiophylla H. & A.;
Thelypodium lasiophyllum (H. & A.) Greene;
Sisymbrium lasiophyllum (H. & A.) M. Brandegees;
Guillenia lasiophylla (H. & A.) Greene]
Beatty Wash(UNLV), Yucca Mtn.(O&C).

Caulanthus pilosus S. Wats.
[=Streptanthus pilosus (Wats.) Jepson]
Beatty Wash(UNLV-C).

Descurainia

Descurainia pinnata (Walt.) Britt. Pinnate tansy-mustard
ssp. halictorum (Ckll.) Detl.
Specie Spring(UNLV), Beatty Wash(JCB), Yucca Mtn.(O&C).

Lepidium

Lepidium flavum Torr.
var. flavum
North Amargosa Valley(JCB).

Lepidium fremontii S. Wats.
Bare Mtn.(JCB), Black Marble Mtn.(UNLV), Chuckwalla Canyon(UNLV),
Yucca Mtn.(UNLV), Busted Butte(UNLV), Forty-Mile Wash(UNLV), Beatty
Wash(UNLV-C).

Lepidium lasiocarpum Nutt. ex T. & G. Hispidcress
North Amargosa Valley(JCB), Yucca Mtn.(O&C,UNLV), Solitario
Canyon(UNLV).

Sisymbrium

Sisymbrium altissimum L. Tumbling-mustard
[=Norta altissima Britt.]
Specie Spring(UNLV), Tates Wash(UNLV), Yucca Mtn.(O&C).

Stanleya

Stanleya pinnata (Pursh) Britt. Prince's-plume
var. inyoensis (Munz & Roos) Reveal
Below North Yucca Mtn.(JCB), Tates Wash(UNLV), Yucca Mtn.(UNLV),
Beatty Wash(UNLV-C).

Streptanthella

Streptanthella longirostris Nutt.
[=Arabis longirostris Wats.;
Streptanthus longirostris (Wats.) Wats.;
Thelypodium longirostris (Wats.) Jepson]
Crater Flat(JCB), Busted Butte(UNLV).

Streptanthus

Streptanthus cordatus Nutt. ex T. & G.
var. cordatus
[=Euklisia cordata (Nutt.) Rydb.;
Cartiera cordata (Nutt.) Greene;
S. crassifolius Greene]
Beatty Wash(UNLV).

Thysanocarpus

Thysanocarpus curvipes Hook.
[=T. curvipes var. eradiatus Jepson;
T. curvipes var. longistylus Jepson;
T. trichocarpus Rydb.]
Steves Pass(UNLV), Specie Spring(UNLV), Fluorspar Canyon(UNLV-C),

Crescent Cliff(UNLV), Yucca Mtn.(JCB,O&C,UNLV).

Cactaceae Cactus Family

Echinocactus

Echinocactus polycephalus Engelm. & Bigel. Clustered barrel cactus
Black Marble Mtn.(UNLV), Crater Flat(UNLV), Chuckwalla Canyon(UNLV),
Crescent Cliff(UNLV), Tarantula Canyon(UNLV), Yucca Mtn.(O&C,UNLV),
Busted Butte(UNLV), Beatty Wash(UNLV), Solitario Canyon(UNLV),
canyon north of Wildcat Peak (UNLV).

Echinocereus

Echinocereus engelmannii (Parry) Lem. Hedgehog cactus
var. chrysocentrus (Engelm. & Bigel.) Engelm.
[=Cereus engelmannii Parry var. chrysocentrus Engelm. & Bigel.;
E. engelmannii var. purpureus L. Benson]
Steves Pass(UNLV), Black Marble Canyon(UNLV), Chuckwalla
Canyon(UNLV), Specie Spring(UNLV), Fluorspar Canyon(UNLV), Bates
Wash(UNLV), Crescent Cliff(UNLV), Tarantula Canyon(UNLV), Yucca
Mtn.(UNLV), Busted Butte(UNLV), Beatty Wash(UNLV), Solitario
Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Echinocereus triglochidiatus Engelm. Claretcup
var. melanacanthus (Engelm.) L. Benson
[=E. coccineus Engelm. var. melanacanthus Engelm.;
E. triglochidiatus var. inermis (K. Schum.) Rowley;
E. phoeniceus var. inermis K. Schum.]
Tarantula Canyon(UNLV-C), Solitario Canyon(UNLV).

Mammillaria

Mammillaria tetrancistra Engelm. Fish-hook cactus
[=Phellosperma tetrancistra (Engelm.) Britt. & Rose]
Crescent Cliff(UNLV), Busted Butte(UNLV), canyon north of Wildcat
Peak(UNLV-C).

Opuntia

Opuntia basilaris Engelm. & Bigel. Beavertail cactus
var. basilaris
Black Marble Mtn.(UNLV), Crater Flat(UNLV), Chuckwalla Canyon(UNLV),
Fluorspar Canyon(UNLV), Bates Wash(UNLV), Tarantula Canyon(UNLV),
Yucca Mtn.(O&C,UNLV), Busted Butte(UNLV), Beatty Wash(UNLV),
Solitario Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Opuntia echinocarpa Engelm. & Bigel. Silver cholla
var. echinocarpa
Steves Pass(UNLV), Black Marble Canyon(UNLV), Crater Flat(UNLV),
Fluorspar Canyon(UNLV), Yucca Mtn.(O&C), Bates Wash(UNLV), Beatty
Wash(UNLV), canyon north of Wildcat Peak(UNLV).

Opuntia erinacea Engelm. & Bigel.
var. erinacea
[=Q. ursina Weber in Boiss;
Q. rubrifolia Engelm. ex Coult.;
Q. hystricina sensu Utah authors]
Chuckwalla Canyon(UNLV-C), Specie Spring(UNLV), Crescent
Cliff(UNLV), Tarantula Canyon(UNLV), Busted Butte(UNLV).

Sclerocactus

Sclerocactus polyancistrus (Engelm.) Britt. & Rose Mohave fish-hook
[=Echinocactus polyancistrus Engelm. & Bigel.] cactus
Fluorspar Canyon(UNLV), Specie Spring(UNLV-C), Bates Wash(UNLV),
Yucca Mtn.(UNLV-C), Beatty Wash(UNLV), Solitario Canyon(UNLV).

Campanulaceae Bellflower Family

Nemacladus

Nemacladus glanduliferus Jeps.
var. orientalis McVaugh
Chuckwalla Canyon (UNLV), Beatty Wash (UNLV-C), Solitario
Canyon (UNLV).

Nemacladus rubescens Greene
Yucca Mtn. (O&C).

Nemacladus sigmoides Robbins
Yucca Mtn. (UNLV-C).

Capparaceae Caper Family

Cleome

Cleome lutea Hook. Yellow bee-plant
Lower Forty-Mile Canyon Wash (UNLV).

Caprifoliaceae Honeysuckle Family

Symphoricarpos

Symphoricarpos longiflorus A. Gray Fragrant snowberry
North Bare Mtn. (JCB), Tarantula Canyon (UNLV), Busted Butte (UNLV),
Chuckwalla Canyon (UNLV-C), Beatty Wash (UNLV-C).

Caryophyllaceae Pink Family

Arenaria

Arenaria congesta (Nutt.) ex Torr. & Gray Looseflower sandwort
var. subcongesta (S. Wats.) S. Wats.
[=A. fendleri var. subcongesta Wats.]
Beatty Wash (UNLV-C).

Arenaria macradenia S. Wats. Desert sandwort
var. macradenia
[=A. macradenia S. Wats. var. parishiorum Robinson
A. macradenia S. Wats. ssp. ferrisiae Abrams]
Chuckwalla Canyon (UNLV-C), Specie Spring (UNLV), Crescent
Cliff (UNLV), Tarantula Canyon (UNLV), Beatty Wash (UNLV), canyon north
of Wildcat Peak (UNLV-C).

Celastraceae Staff-Tree Family

Forsellesia

Forsellesia nevadensis (A. Gray) Greene Nevada greasebush
[=Glossopetalon meionandrum Koehne]
Specie Spring (UNLV), Tarantula Canyon (UNLV).

Chenopodiaceae Goosefoot Family

Atriplex

Atriplex canescens (Pursh) Nutt. Fourwing saltbrush
var. canescens
[=Calligonum canescens Pursh]
North Crater Flat (UNLV), Chuckwalla Canyon (UNLV), Tarantula
Canyon (UNLV), Tate's Wash (UNLV), Yucca Mtn. (O&C, UNLV), Forty-Mile
Wash (UNLV), Beatty Wash (UNLV), Solitario Canyon (UNLV).

Atriplex confertifolia (Torr. & Frem.) S. Wats. Shadscale

Tates Wash(UNLV), Beatty Wash(UNLV-C).

Salsola

Salsola paulsenii Litv.

Russian-thistle

Crater Flat(UNLV), Yucca Mtn.(O&C,UNLV), Busted Butte(UNLV), Beatty Wash(UNLV), Solitario Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Crossosomataceae

Glossopetalon

Glossopetalon pungens Brandege

[=Forsellesia pungens (Brandegee) A. A. Heller]
Tarantula Canyon(UNLV-C).

Cuscutaceae Dodder Family

Cuscuta

Cuscuta denticulata Engelm.

Small-tooth dodder

[=Grammica denticulata (Engelm.) W. A. Weber]
Below Bare Mtn.(JCB).

Cuscuta salina Engelm.

Salt dodder

[=C. californica var. squamigera Engelm.;
C. squamigera (Engelm.) Piper;
Grammica salina (Engelm.) Taylor & Macbryde;
C. veatchii var. apoda Yuncker;
C. nevadensis Johnston;
C. salina var. apoda Yuncker) Yuncker]
North Amargosa Valley(JCB).

Euphorbiaceae Spurge Family

Euphorbia

Euphorbia albomarginata Torr. & Gray

Rattlesnake-weed

Crater Flat(JCB), Specie Spring (UNLV), Fluorspar Canyon(UNLV-C),
Tates Wash(UNLV), Crescent Canyon (UNLV), Tarantula Canyon(UNLV),
Yucca Mtn.(UNLV), Forty-Mile Wash(UNLV), Beatty Wash(UNLV),
Solitario Canyon(UNLV).

Euphorbia fendleri Torr. & Gray

Fendler's euphorb

Busted Butte(UNLV).

Euphorbia micromera Boiss.

[=E. podagrica Johnst.;

Chamaesyce micromera (Engelm.) Wooton & Standley]
Crater Flat(JCB).

Euphorbia parishii Greene

[=Chamaesyce parishii (E. Greene) Millsp.]
Below Red Cinder Cone (Crater Flat)(JCB).

Euphorbia setiloba Engelm. in Torr.

Fringed spurge

[=Chamaesyce setiloba (Torrey) Millsp. ex Parish]
Northwest Crater Flat(JCB).

Fabaceae (Leguminosae) Pea Family

Astragalus

Astragalus acutirostris S. Wats.

Crater Flat(JCB), Yucca Mtn.(UNLV-C).

- Astragalus didymocarpus Hook. & Arn. Two-seeded milkvetch
var. dispermus (A. Gray) Jeps.
Crescent Cliff (UNLV).
- Astragalus funereus M. E. Jones Black milkvetch
Below Northern Yucca Mtn. (JCB).
- Astragalus layneae Greene
Specie Spring (UNLV-C), North Bare Mtn. (JCB), Chuckwalla Canyon (UNLV-C),
Tates Wash (UNLV), Beatty Wash (UNLV).
- Astragalus lentiginosus Dougl. Freckled milkvetch
var. fremontii (A. Gray) S. Wats.
[=A. fremontii Gray ex. Torr.;
A. coulteri var. fremontii (Gray) Jones;
Cystium fremontii (Gray) Rydb.]
Crater Flat (JCB), Tates Wash (UNLV-C), Forty-Mile Wash (UNLV-C).
- Astragalus lentiginosus Dougl. Shining milkvetch
var. variabilis Barneby
Lower Forty-Mile Wash (UNLV-C).
- Astragalus nuttallianus DC. Small-flowered milkvetch
var. imperfectus (Rydb.) Barneby
Chuckwalla Canyon (UNLV-C), Yucca Mtn. (O&C, UNLV-C).
- Astragalus purshii Dougl. Pursh's milkvetch
var. tinctus M. E. Jones
Fluorspar Canyon (UNLV), Beatty Wash (UNLV).
- Lathyrus**
Lathyrus hitchcockianus Barneby & Reveal
Yucca Mtn. (JCB).
- Lotus**
Lotus humistatus Greene Low trefoil
Yucca Mtn. (JCB, O&C, UNLV), Solitario Canyon (UNLV-C).
- Lotus strigosus (Nutt.) E. Greene
[=L. tomentellus Greene]
Yucca Mtn. (UNLV-C).
- Lupinus**
Lupinus brevicaulis S. Wats.
Yucca Mtn. (O&C).
- Lupinus concinnus Agardh Elegant lupine
var. orcuttii (S. Wats.) C. P. Sm.
[=L. micensis Jones;
L. orcuttii Wats.;
L. concinnus ssp. orcuttii (Wats.) Dunn]
Beatty Wash (JCB).
- Lupinus flavoculatus Heller Yellow-eye lupine
[=L. rubens var. flavoculatus (Heller) C.P. Small;
L. odoratus var. flavoculatus (Heller) Jepson]
Below Northern Bare Mtn. (JCB), Yucca Mtn. (O&C).
- Psorothamnus**
Psorothamnus fremontii (Torr.) Barneby Fremont's indigobush
var. fremontii
[=Dalea fremontii Torr. ex Gray;

Parosela fremontii (Torr.) Vail;
Psorodendron fremontii (Torr.) Rydb.;
Dalea johnsonii Wats.;
Parosela johnsonii (Wats.) Vail;
Psorodendron johnsonii (Wats.) Rydb.;
Parosela johnsonii var. minutiflora Parish);
Dalea fremontii var. minutifolia (Parish) L. Benson]
 Crater Flat(JCB, UNLV), Chuckwalla Canyon(UNLV), Fluorspar
 Canyon(UNLV), Bates Wash(UNLV), Crescent Cliff(UNLV), Tarantula
 Canyon(UNLV), Busted Butte(UNLV), Beatty Wash(UNLV).

Psorothamnus polydenius (Torr.) Rydb. Glandular indigobush
 [=Dalea polydenius Torr. ex Wats.;
Parosela polydenia (Torr.) Heller]
 Forty-Mile Wash(UNLV), Beatty Wash(UNLV-C).

Geraniaceae Geranium Family

Erodium

Erodium cicutarium (L.) L'Her. Storksbill
 [=Geranium cicutarium L.]
 Chuckwalla Canyon(UNLV), Specie Spring(UNLV), Fluorspar
 Canyon(UNLV), Crescent Cliff(UNLV), Tarantula Canyon(UNLV), Yucca
 Mtn.(O&C,UNLV-C), Beatty Wash(UNLV), Solitario Canyon(UNLV).

Hydrophyllaceae Waterleaf Family

Emmenanthe

Emmenanthe penduliflora Benth. Whispering-bells
 Crescent Cliff(UNLV-C), Fluorspar Canyon(UNLV).

Eucrypta

Eucrypta chrysanthemifolia (Benth.) Greene
 var. bipinnatifida (Torr.) Const.
 Chuckwalla Canyon(UNLV-C), Specie Spring(UNLV), Tarantula
 Canyon(UNLV), Beatty Wash(UNLV), canyon north of Wildcat Peak(UNLV).

Eucrypta micrantha (Torr.) Heller Desert eucrypta
 [=Phacelia micrantha Torr;
P. pinetorum Jones;
Ellisia micrantha (Torr.) Brand.;
Nyctelea pinetorum (Jones) Tides.]
 Crescent Cliff(UNLV).

Nama

Nama demissum A. Gray Purple-mat
 var. demissum
 [=Conanthus demissus (Gray) Heller
N. demissum var. deserti Brand.]
 Red Cinder Cone (Crater Flat)(JCB), Yucca Mtn.(O&C).

Phacelia

Phacelia crenulata Torr.
 var. crenulata
 [=P. orbicularis Rydb.;
P. crenulata var. funerea J. Voss]
 Bates Wash(UNLV), Solitario Canyon(UNLV-C).

Phacelia fremontii Torr. in Ives
 Crater Flat(JCB), Yucca Mtn.(O&C,UNLV-C), Chuckwalla Canyon(UNLV).

Phacelia mustelina Cov. Death Valley round-leaf

Solitario Canyon(UNLV-C) .

Phacelia pedicellata A. Gray
Canyon north of Wildcat Peak(UNLV) .

*Phacelia perityloides Cov. Crevise phacelia
var. jaegeri Munz
[=P. laxiflora J.T. Howell
P. perityloides var. laxiflora (J.T. Howell) Cronq.]
Chuckwalla Canyon(UNLV), Tarantula Canyon(UNLV), canyon north of
Wildcat Peak(UNLV) .

Phacelia rotundifolia Torr. ex S. Wats. Limestone phacelia
North Yucca Mtn.(JCB), Black Marble Mtn.(UNLV), Chuckwalla
Canyon(UNLV-C), Beatty Wash(UNLV), Solitario Canyon(UNLV-C) .

Phacelia saxicola A. Gray Rock phacelia
Solitario Canyon(UNLV-C) .

Phacelia vallis-mortae J. Voss Death Valley phacelia
var. vallis-mortae
Crater Flat(JCB), Yucca Mtn.(O&C) .

Tricardia

Tricardia watsonii Torr. ex Wats. Three-hearts
Tates Wash(UNLV-C), Tarantula Canyon(UNLV) .

Krameriaceae Krameria Family

Krameria

Krameria parvifolia Benth. Range ratany
[=K. erecta Schultes;
K. parvifolia var. imparata J.F. Macbr.;
K. glandulosa Rose & Painter;
K. imparata (Britt.) Macbr.]
Crater Flat(UNLV), Yucca Mtn.(UNLV-C), Busted Butte(UNLV), Solitario
Canyon(UNLV) .

Lamiaceae (Labiatae) Mint Family

Monardella

Monardella odoratissima Benth.
[=Madronella oblongifolia Rydb.;
Madronella sessilifolia Rydb.;
Monardella parvifolia Greene]
Chuckwalla Canyon(UNLV) .

Salazaria

Salazaria mexicana Torr. Bladder sage
Crater Flat(JCB), Chuckwalla Canyon(UNLV), Specie Spring(UNLV),
Fluorspar Canyon(UNLV), Tates Wash(UNLV), Crescent Cliff(UNLV),
Tarantula Canyon(UNLV), Yucca Mtn.(O&C,UNLV), Busted Butte(UNLV),
Beatty Wash(UNLV-C), Solitario Canyon(UNLV), canyon north of Wildcat
Peak(UNLV) .

Salvia

Salvia columbariae Benth. Chia
var. columbariae
Forty-Mile Wash(UNLV), Chuckwalla Canyon(UNLV-C), Beatty Wash(JCB,
UNLV-C), Solitario Canyon(UNLV) .

Salvia dorrii (Kell.) Abrams Dorr's sage

var. dorrii
 [=Audibertia dorrii Kellogg;
Audibertiella argentea Rydb.;
S. pilosa Merriam;
S. carnos Dougl.;
S. carnos var. pilosa Jepson;
S. dorrii var. argentea (Epl.) Munz;
S. dorrii var. gilmanii (Epl.) Abrams]
 Below North Yucca Mtn.(JCB), Bare Mtn.(JCB), Bates Wash(UNLV),
 Chuckwalla Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Loasaceae Stick-leaf Family

Eucnide

Eucnide urens (Gray) Parry Rocknettle
 [=Mentzelia urens Gray]
 Canyon north of Wildcat Peak(UNLV-C).

Mentzelia

Mentzelia albicaulis Dougl. ex Hook
 [=M. albicaulis var. gracilis (Rydb.) Darlington]
 Crater Flat(JCB), Yucca Mtn.(O&C).

Mentzelia nitens Greene
 Beatty Wash(JCB).

Mentzelia reflexa Cov.
 West slope of Bare Mtn.(JCB).

Petalonyx

Petalonyx nitidus S. Wats. Sandpaper-plant
 [=P. thurberi var. nitidus (Wats.) Jones]
 Bare Mtn.(JCB), Crater Flat(UNLV), Busted Butte(UNLV), canyon north
 of Wildcat Peak(UNLV-C).

Loganiaceae Logania Family

Buddleja

Buddleja utahensis Cov.
 Bare Mtn.(JCB), Chuckwalla Canyon(UNLV), Tarantula Canyon(UNLV).

Malvaceae Mallow Family

Eremalche

Eremalche exilis (A. Gray) Greene
 [=Malvastrum exile Gray;
Malveopsis exile (Gray) Kuntze;
Eremalche exile (Gray) Greene;
Sphaeralcea exile (Gray) Jepson]
 Beatty Wash(JCB).

Eremalche rotundifolia (A. Gray) Greene Desert-fivespot
 [=Malvastrum rotundifolia A. Gray]
 Near Red Cinder Cone (Crater Flat)(JCB).

Sphaeralcea

Sphaeralcea ambigua A. Gray Apricot-mallow, globe-mallow
 ssp. ambigua
 [=S. ambigua var. monticola Kearney]
 Black Marble Mtn.(UNLV), Chuckwalla Canyon(UNLV), Tarantula
 Canyon(UNLV), Specie Spring(UNLV), Fluorspar Canyon(UNLV), Bates
 Wash(UNLV), Crescent Cliff(UNLV), Yucca Mtn.(O&C,UNLV-C), Busted

Butte(UNLV), Beatty Wash(UNLV), Solitario Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Nyctaginaceae Four O'Clock Family

Abronia

Abronia turbinata S. Wats. Sand-verbena
Lower Forty-Mile Wash(UNLV-C).

Mirabilis

Mirabilis bigelovii A. Gray
var. bigelovii
[=M. bigelovii var. aspera (E. Greene) Munz]
Crater Flat(UNLV), Chuckwalla Canyon(UNLV), Bates Wash(UNLV),
Tarantula Canyon(UNLV), Yucca Mtn(O&C,UNLV), Beatty Wash(JCB, UNLV-
C), Solitario Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Mirabilis froebelii (Behr) Greene
[=M. multiflora (Torrey) A. Gray var. pubescens S. Wats.;
M. froebellii (Behr.) E. Greene;
M. froebellii var. glabrata (Standley) Jepson]
Bare Mtn.(JCB), Fluorspar Canyon(UNLV).

Oleaceae Olive Family

Forestiera

Forestiera pubescens Nutt. Coyote-bush
[=F. neomexicana Gray;
Adelia neomexicana (Gray) Kuntze;
A. parvifolia Cov.]
Specie Spring(UNLV-C).

Fraxinus

Fraxinus anomala Torr. ex Wats. Singleleaf ash
Tarantula Canyon(UNLV), Chuckwalla Canyon(UNLV-C).
Fraxinus velutina Torr. Velvet ash
[=F. velutina var. coriacea (S. Wats.) Rehder]
Chuckwalla Canyon(UNLV-C).

Menodora

Menodora spinescens A. Gray
Crater Flat(JCB, UNLV-C), Fluorspar Canyon(UNLV), Bates Wash(UNLV),
Yucca Mtn.(O&C,UNLV-C), Busted Butte(UNLV), Forty-Mile Wash(UNLV),
Beatty Wash(UNLV), Solitario Canyon(UNLV).

Onagraceae Evening-primrose Family

Camissonia

Camissonia boothii (Dougl.) Raven
ssp. condensata (Munz) Raven
[=Oenothera decorticans var. condensata Munz;
C. boothii ssp. condensata (Munz) Raven]
Yucca Mtn.(O&C,JCB), Bare Mtn.(JCB).

Camissonia brevipes (A. Gray) Raven
ssp. brevipes
[=Oenothera brevipes Gray;
Chylismia brevipes (Gray) Small]
Crater Flat(JCB), Beatty Wash(UNLV), Yucca Mtn.(O&C).

Camissonia brevipes (A. Gray) Raven

ssp. pallidula (Munz) Raven
[=Oenothera brevipes var. pallidula Munz]
North Amargosa Valley(JCB).

Camissonia claviformis (Torr. & Frem.) Raven
ssp. integrior (Raven) Raven
[=Oenothera claviformis Torr. & Frem. in Frem.;
O. scapoidea var. claviformis (Torr. & Frem.) Wats.;
Chylisma claviformis (Torr. & Frem.) Heller]
North Amargosa Valley (Beatty Wash) (JCB).

Camissonia heterochroma (S. Wats.) Raven Shockley's evening primrose
[=Oenothera heterochroma S. Wats.]
North Amargosa Valley(JCB), Below Yucca Mtn.(JCB).

Camissonia kernensis (Munz) Raven
ssp. gilmanii (Munz) Raven
[=Oenothera kernensis var. gilmanii (Munz) Munz]
Beatty Wash(UNLV-C).

Camissonia refracta (S. Wats.) Raven
[=Oenothera refracta Wats.]
Bare Mtn.(JCB).

Camissonia walkeri (A. Nels.) Raven
ssp. tortilis (Jeps.) Raven
[=Oenothera brevipes var. parviflora Wats.;
Oenothera walkeri (A. Nels.) Raven;
Chylisma walkeri A. Nels.;
Oenothera scapoidea var. tortilis Jepson;
Camissonia walkeri ssp. tortilis (Jepson) Raven;
Oenothera multiuga var. orientalis Munz]
North Bare Mtn.(JCB), Busted Butte(UNLV), canyon north of Wildcat
Peak(UNLV).

Oenothera

Oenothera caespitosa Nutt. Morning-lily
ssp. marginata (Nutt.) Munz
[=Oenothera montana Nutt. in T. & G.;
Oenothera marginata var. purpurea Wats.;
Pachylophus canescens Piper]
Specie Spring(UNLV), Tates Wash(UNLV), Yucca Mtn.(UNLV), Beatty
Wash(JCB).

Oenothera deltoidea Torr. & Frem. Dune-primrose
ssp. deltoidea
[=Anogra deltoidea (Torr. & Frem.) Small]
West Jackass Flats(JCB), Yucca Mtn.(O&C).

Orobanchaceae Broom-rape Family

Orobanche

Orobanche ludoviciana Nutt.
var. cooperi (A. Gray) Beck
[=Aphyllon cooperi Gray;
O. cooperi (Gray) Heller]
Chuckwalla Canyon(UNLV).

Papaveraceae Poppy Family

Eschscholzia

Eschscholzia glyptosperma Greene Mojave-poppy

Beatty Wash(UNLV).

Eschscholzia minutiflora S. Wats.

[=E. minutiflora var. covillei (E. Greene) C. Clark;

E. minutiflora var. twisselmannii C. Clark]

Tates Wash(UNLV-C), Yucca Mtn.(JCB, UNLV), Forty-Mile Wash(UNLV),
Chuckwalla Canyon(UNLV), Beatty Wash(UNLV), Solitario Canyon(UNLV).

Plantaginaceae Plantain Family

Plantago

Plantago insularis Eastw.

var. fastigiata (Morris) Jeps.

[=P. fastigiata Morris]

Bare Mtn.(JCB), Yucca Mtn.(JCB).

Polemoniaceae Phlox Family

Eriastrum

Eriastrum eremicum (Jeps.) Mason

[=Huegelia eremica Jepson]

Yucca Mtn.(O&C,UNLV), Solitario Canyon(UNLV-C), Beatty Wash(UNLV).

Eriastrum wilcoxii (A. Nelson) Mason

Yucca Mtn.(O&C).

Gilia

Gilia brecciarum M. E. Jones

ssp. brecciarum

Below Northwest Yucca Mtn., Beatty Wash(JCB).

Gilia campanulata A. Gray

South Forty-Mile Wash(JCB).

Gilia cana (M. E. Jones) Heller

ssp. speciformis A. & V. Grant

Areas of Yucca Mtn. and East face of Bare Mtn.(JCB), Beatty
Wash(JCB), Tungsten Canyon(JCB), Red Cinder Cone (Crater Flat) (JCB).

Gilia cana (M. E. Jones) Heller

ssp. triceps (Brand) A. & V. Grant

Beatty Wash(UNLV-C).

Gilia hutchinsifolia Rydb.

[=G. leptomeria ssp. rubella (Brand.) Mason & Grant]

North Amargosa Valley, (and between Bare Mtn. and Yucca Mtn.) (JCB).

Gilia latifolia S. Wats.

Spring gilia

Bare Mtn.(JCB), Chuckwalla Canyon(UNLV-C).

Gilia ophthalmoides Brand.

Below Northwest Yucca Mtn. (Fluorspar Canyon) (JCB).

Gilia ripleyi Barneby

Ripley's gilia

Canyon north of Wildcat Peak(UNLV-C).

Gilia scopulorum M. E. Jones

[=G. scopulorum var. deformis Brand]

Bare Mtn.(JCB).

Gilia sinuata Dougl. ex Benth.

Beatty Wash(JCB).

Gilia stellata Heller
Beatty Wash(UNLV).

Star gilia

Gilia transmontana (Mason & Grant) A. & V. Grant
Northwest Yucca Mtn.(JCB).

Ipomopsis

Ipomopsis polycladon (Torr.) V. Grant
[=Gilia polycladon Torr.]
North Amargosa Valley(JCB), Yucca Mtn.(O&C).

Langloisia

Langloisia schottii (Torr.) Greene
[=Navarretia schottii Torr. in Emory]
Northern Amargosa Valley (Beatty Wash) (JCB), below Red Cinder Cone
(Crater Flat) (JCB), Yucca Mtn.(O&C).

Langloisia setosissima (Torr. & Gray) Greene
[=Navarretia setosissima T. & G. ex Torr. in Ives]
Scattered areas of North Amargosa Valley(JCB), Southwest Crater
Flat(JCB).

Leptodactylon

Leptodactylon pungens (Torr.) Rydb.
[=L. pungens ssp. hallii (Parish) Mason;
L. pungens ssp. hookeri (Douglas) Wherry;
L. pungens ssp. pulchriflorum (Brand) H. Mason]
Bare Mtn.(JCB), Chuckwalla Canyon(UNLV), Tarantula Canyon(UNLV),
Fluorspar Canyon(UNLV), Tates Wash(UNLV), Crescent Cliff(UNLV),
Yucca Mtn.(UNLV-C), Busted Butte(UNLV), Beatty Wash(UNLV), canyon
north of Wildcat Peak(UNLV).

Linanthus

Linanthus bigelovii (A. Gray) Greene
Yucca Mtn.(O&C).

Linanthus demissus (A. Gray) Greene
Yucca Mtn.(O&C).

Linanthus dichotomus Benth. Evening-snow
West Crater Flat(JCB).

Linanthus jonesii (A. Gray) Greene
Below Bare Mtn. (SW Crater Flat) (JCB), Chuckwalla Canyon(UNLV).

Phlox

Phlox longifolia Nutt. Longleaf phlox
[=Phlox stansburyi (Torr.) Heller
P. speciosa var. stansburyi Torr. in Emory;
P. longifolia var. stansburyi (Torr.) Gray;
P. longifolia var. brevifolia (Gray) Gray;
P. grahamii Wherry]
Below North Bare Mtn.(JCB), Specie Spring(UNLV-C), Fluorspar
Canyon(UNLV), Crescent Cliff(UNLV), Yucca Mtn.(JCB,UNLV).

Polygonaceae Buckwheat Family

Chorizanthe

Chorizanthe brevicornu Torr. Brittle spineflower
var. brevicornu
Chuckwalla Canyon(UNLV), Solitario Canyon(UNLV), Yucca Mtn.(O&C).

Chorizanthe rigida (Torr.) Torr. & Gray Rigid spineflower
[=Acanthogonum rigidum Torr.]
Black Marble Mtn.(UNLV), Yucca Mtn.(O&C,UNLV), Busted Butte(UNLV),
Beatty Wash(UNLV).

Chorizanthe thurberi (A. Gray) S. Wats. Thurber's spineflower
[=Centrosteugia thurberi Gray]
West Crater Flat(JCB), Beatty Wash(UNLV-C), Yucca Mtn.(O&C).

Chorizanthe watsonii Torr. & Gray Watson's spineflower
Beatty Wash(UNLV-C).

Eriogonum

Eriogonum brachypodum Torr. & Gray Parry's buckwheat
[=E. parryi Gray;
E. deflexum ssp. parryi (Gray) Stokes;
E. deflexum var. brachypodium (T. & G.) Stokes]
Bare Mtn.(JCB), Chuckwalla Canyon(UNLV-C).

Eriogonum deflexum Torr. in Ives Skeletonweed buckwheat
[=E. deflexum var. nevadense Reveal]
North Amargosa Valley(JCB), Northwest Crater Flat(JCB), Tarantula
Canyon(UNLV), Yucca Mtn.(O&C,UNLV), Busted Butte(UNLV), Forty-Mile
Wash(UNLV), Beatty Wash(UNLV).

Eriogonum fasciculatum Benth. Mojave buckwheat
var. polifolium (Benth. in DC.) Torr. & Gray
[=E. polifolium Benth. in DC.]
Black Marble Mtn(UNLV), Crater Flat(UNLV), Chuckwalla Canyon(UNLV),
Specie Spring(UNLV), Tates Wash(UNLV), Crescent Cliff(UNLV),
Tarantula Canyon(UNLV), Yucca Mtn.(O&C,UNLV-C), Busted Butte(UNLV),
Beatty Wash(UNLV-C), Solitario Canyon(UNLV), canyon north of Wildcat
Peak(UNLV).

Eriogonum glandulosum (Nutt.) Nutt. ex Benth.
[=E. carneum (J. Howell) Reveal]
Canyon north of Wildcat Peak(UNLV).

Eriogonum heermannii Dur. & Hilg. Heermann's buckwheat
var. humilius (S. Stokes) Reveal
Chuckwalla Canyon(UNLV), Tarantula Canyon(UNLV), Beatty Wash(UNLV),
canyon north of Wildcat Peak(UNLV).

Eriogonum inflatum Torr. & Frem. Desert-trumpet
Steves Pass(UNLV), Crater Flat(UNLV), Chuckwalla Canyon(UNLV),
Specie Spring(UNLV), Tates Wash(UNLV), Tarantula Canyon(UNLV), Yucca
Mtn.(O&C,UNLV-C), Busted Butte(UNLV), Beatty Wash(UNLV), Solitario
Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Eriogonum maculatum Heller Spotted buckwheat
[=E. angulosum var. maculatum (Heller) Jepson;
E. angulosum ssp. maculatum (Heller) Stokes]
Black Marble Mtn.(UNLV), Chuckwalla Canyon(UNLV-C), Yucca
Mtn.(O&C).

Eriogonum microthecum Nutt. Slender buckwheat
var. foliosum (Torr. & Gray) Reveal
[=E. effusum var. foliosum T. & G.;
E. simpsonii Benth in DC.;
E. friscanum Jones]
Bare Mtn.(JCB), Fluorspar Canyon(UNLV), Tates Wash(UNLV), Tarantula
Canyon(UNLV), Chuckwalla Canyon(UNLV), Yucca Mtn.(UNLV), Beatty

Wash(UNLV).

Eriogonum nidularium Cov. Birdnest buckwheat
Fluorspar Canyon(UNLV), Bates Wash(UNLV), Yucca Mtn.(UNLV), Busted Butte(UNLV), Beatty Wash(UNLV-C), Solitario Canyon(UNLV-C), canyon north of Wildcat Peak(UNLV).

Eriogonum pusillum Torr. & Gray Low buckwheat
[=E. reniforme ssp. pusillum (T. & G.) Stokes]
Beatty Wash(JCB, UNLV-C), Solitario Canyon(UNLV-C), Yucca Mtn.(O&C).

Eriogonum reniforme Torr. & Frem.
Northwest Amargosa Valley, Beatty Wash(JCB).

Eriogonum rixfordii S. Stokes Rixford's buckwheat
Bates Wash(UNLV), Busted Butte(UNLV), canyon north of Wildcat Peak(UNLV).

Eriogonum saxatile S. Wats.
Yucca Mtn.(JCB).

Eriogonum thomasi Torr. Thomas' buckwheat
[=E. minutiflorum Wats.]
Bare Mtn.(JCB).

Eriogonum trichopes Torr. Slender-stipe buckwheat
[=E. trichopodum Torr. in DC.;
E. trichopodum var. minus Benth. in DC.]
Bare Mtn.(JCB), Steves Pass(UNLV), Black Marble Canyon(UNLV), Crater Flat(UNLV), Chuckwalla Canyon(UNLV), Yucca Mtn(UNLV).

*Eriogonum wrightii Torr. in DC. Wright's buckwheat
Specie Spring(UNLV), Bates Wash(UNLV).

Oxytheca

Oxytheca perfoliata Torr. & Gray
[Eriogonum perfoliatum (T. & G.) Stokes]
Fluorspar Canyon(UNLV), Bates Wash(UNLV), Yucca Mtn.(O&C,UNLV), Beatty Wash(UNLV), Solitario Canyon(UNLV).

Portulacaceae Purslane Family

Callandrinia

*Callandrinia ciliata (R. & P.) DC. Red-maids
[=C. ciliata var. menziesii (Hook.) Macbr.;
C. ciliata var. micrantha Schldl.]
Crescent Cliff(UNLV-C).

Calyptridium

Calyptridium monandrum Nutt. in Torr. & Gray
Below Red Cinder Cone (Crater Flat)(JCB).

Montia

Montia perfoliata (Donn) Howell Miners-lettuce
var. utahensis (Rydb.) Munz
[=Claytonia perfoliata Donn.]
Specie Spring(UNLV-C), Crescent Cliff(UNLV), Tarantula Canyon(UNLV), Chuckwalla Canyon(UNLV), Yucca Mtn.(JCB,UNLV).

Ranunculaceae Crowfoot Family

Anemone

Anemone tuberosa Rydb. Desert anemone
Chuckwalla Canyon(UNLV-C), Tates Wash(UNLV), Crescent Cliff(UNLV),
Tarantula Canyon(UNLV).

Delphinium

Delphinium parishii A. Gray Desert larkspur
var. parishii
Crater Flat(JCB), Chuckwalla Canyon(UNLV), Fluorspar Canyon(UNLV),
Tates Wash(UNLV), Tarantula Canyon(UNLV), Yucca Mtn.(O&C,UNLV).

Ranunculus

Ranunculus andersonii A. Gray Violet buttercup
var. andersonii
[=R. andersonii var. tenellus Wats.]
Tarantula Canyon(UNLV-C).

Rosaceae Rose Family

Cercocarpus

Cercocarpus intricatus S. Wats. Dwarf mountain-mahogany
[=C. ledifolius var. intricatus (Wats.) Jones;
C. intricatus var. villosus Schneider;
C. arizonicus Jones]
Tarantula Canyon(UNLV-C).

Coleogyne

Coleogyne ramosissima Torr. Blackbrush
Chuckwalla Canyon, (UNLV) Specie Spring(UNLV), Fluorspar
Canyon(UNLV), Tates Wash(UNLV), Crescent Cliff(UNLV), Tarantula
Canyon(UNLV), Busted Butte(UNLV), Beatty Wash(UNLV).

Fallugia

Fallugia paradoxa (D. Don) Endl. Apache-plume
[=Sieversia paradoxa D. Don]
Tarantula Canyon(UNLV).

Petrophytum

Petrophytum caespitosum (Nutt.) Rydb. Rock-spiraea
[=Spiraea caespitosa Nutt. in T. & G.;
Eriogyna caespitosa (Nutt.) Wats.;
Luetkea caespitosa (Nutt.) Kuntze]
Tarantula Canyon(UNLV), Chuckwalla Canyon(UNLV).

Prunus

Prunus fasciculata (Torr.) A. Gray Desert-almond
[=Emplectocladus fasciculatus Torr.]
Crater Flat(JCB), Chuckwalla Canyon(UNLV-C), Specie Spring(UNLV),
Crescent Cliff(UNLV), Yucca Mtn.(UNLV), canyon north of Wildcat
Peak(UNLV).

Purshia

Purshia glandulosa Curran
Specie Spring(UNLV-C), Fluorspar Canyon(JCB, UNLV), Tates
Wash(UNLV), Crescent Cliff(UNLV), Tarantula Canyon(UNLV), Chuckwalla
Canyon(UNLV), Beatty Wash(UNLV-C).

Purshia mexicana (D. Don) Welsh Cliff-rose
[=Cowania mexicana D. Don var. stansburiana (Torr.) Jeps.]
Bare Mtn.(JCB), Chuckwalla Canyon(UNLV), Specie Spring(UNLV), Beatty

Wash (UNLV) .

Rubiaceae Madder Family

Galium

Galium stellatum Kell.

Black Marble Mtn. (UNLV-C), canyon north of Wildcat Peak (UNLV-C) .

Salicaceae Willow Family

Salix

Salix lasiolepis Benth.

Arroyo willow

var. lasiolepis

Specie Spring (UNLV-C) .

Saxifragaceae Saxifrage Family

Fendlerella

Fendlerella utahensis (S. Wats.) Heller

Utah fendlerella

[=Whipplea utahensis Wats.]

Tarantula Canyon (UNLV-C), Chuckwalla Canyon (UNLV-C) .

Ribes velutinum Green

Desert gooseberry

var. velutinum

Tarantula Canyon (UNLV), Chuckwalla Canyon (UNLV-C) .

Scrophulariaceae Figwort Family

Antirrhinum

Antirrhinum filipes A. Gray

Twining snapdragon

[=Neogaerrhinum filipes (Gray) Rothm.]

Bare Mtn. (JCB) .

Castilleja

Castilleja chromosa A. Nels.

Common paintbrush

[=C. collina A. Nels.;

C. angustifolia (Nutt.) D. Don;

C. martinii Abrams ssp. ewanii (Eastw.) Munz]

Chuckwalla Canyon (UNLV-C), Specie Spring (UNLV-C), Tates Wash (UNLV),
Fluorspar Canyon (JCB, UNLV), Tarantula Canyon (UNLV), Yucca
Mtn. (O&C, UNLV), Beatty Wash (JCB, UNLV), Solitario Canyon (UNLV) .

Mimulus

Mimulus bigelovii (A. Gray) A. Gray

var. cuspidatus A. L. Grant

[=M. bigelovii var. panamintensis Munz;

M. spissus A. L. Grant]

Beatty Wash (UNLV-C) .

Mimulus guttatus Fisch. ex DC.

Common monkey-flower

var. guttatus

[=M. glabratus var. fremontii A. L. Grant;

M. glabratus var. utahensis Pennell]

Specie Spring (UNLV) .

Mimulus rubellus A. Gray

Yucca Mtn. (O&C) .

Mohavea

Mohavea breviflora Cov.

Bare Mtn. (JCB) .

Penstemon

Penstemon floridus Bdg.
ssp. austinii (Eastw.) Keck
Forty-Mile Wash(UNLV-C), Chuckwalla Canyon(UNLV-C), Beatty Wash(UNLV-C).

Solanaceae Nightshade Family

Datura

Datura meteloides A. DC. Indian apple, Jimson-weed, thorn-apple
[=D. wrightii Regel;
Forty-Mile Wash(UNLV)].

Lycium

Lycium andersonii A. Gray
[=L. andersonii var. deserticola (C. Hitchc.) Jepson]
Black Marble Mtn.(UNLV), Crater Flat(UNLV), Fluorspar Canyon(UNLV),
Tates Wash(UNLV-C), Tarantula Canyon(UNLV), Chuckwalla Canyon(UNLV),
Yucca Mtn.(O&C,UNLV), Busted Butte(UNLV), Beatty Wash(UNLV),
Solitario Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Lycium pallidum Miers
var. oligospermum C. L. Hitchc.
Steves Pass(JCB), Busted Butte(UNLV-C), Solitario Canyon(UNLV),
canyon north of Wildcat Peak(UNLV).

Lycium shockleyi A. Gray
Northern Amargosa Valley(JCB), Steves Pass(UNLV), Black Marble
Mtn.(UNLV), Crater Flat(UNLV), Busted Butte(UNLV-C), Forty-Mile
Wash(UNLV), Solitario Canyon(UNLV-C), canyon north of Wildcat
Peak(UNLV).

Nicotiana

Nicotiana trigonophylla Dunal in A. DC. Desert tobacco
var. trigonophylla
Bare Mtn.(JCB), Chuckwalla Canyon(UNLV-C), Beatty Wash(UNLV),
Solitario Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Physalis

Physalis crassifolia Benth. Thicket ground-cherry
Canyon north of Wildcat Peak(UNLV-C).

Solanum

*Solanum americanum Miller
[=Solanum nodiflorum Jacq.]
Forty-Mile Wash(UNLV).

Tamaricaceae Tamarisk Family

Tamarix

Tamarix ramosissima Ledeb. Salt-cedar
[=T. pentandra Pallas]
Forty-Mile Wash(UNLV).

Urticaceae Nettle Family

Parietaria

*Parietaria hesper B.D. Hinton
[=Parietaria floridana Nutt.]
Chuckwalla Canyon(UNLV).

Verbenaceae Vervain Family

Verbena

Verbena bracteata Lag. & Rodr.
Forty-Mile Wash(UNLV-C).

Zygophyllaceae Caltrop Family

Larrea

Larrea tridentata (Sesse & Moc ex DC.) Cov. Creosote-bush
Crater Flat(JCB), Steves Pass(UNLV), Black Marble Mtn.(UNLV), Crater
Flat(UNLV), Tarantula Canyon(UNLV), Bates Wash(UNLV-C), Yucca
Mtn.(O&C,UNLV), Busted Butte(UNLV), Forty-Mile Wash(UNLV), Beatty
Wash(UNLV-C), Solitario Canyon(UNLV), canyon north of Wildcat
Peak(UNLV).

CLASS LILIATAE Monocotyledons

Agavaceae Agave Family

Yucca

Yucca brevifolia Engelm. in Wats. Joshua-tree
[=Y. arborescens (Torr.) Trel.]
Crater Flat(JCB), Bates Wash(UNLV), Tarantula Canyon(UNLV-C),
Chuckwalla Canyon(UNLV), Beatty Wash(UNLV).

Amaryllidaceae Amaryllis Family

Allium

Allium atropurpureum S. Watson
[=A. nevadense S. Wats.]
Specie Spring(UNLV).

Dichelostemma

Dichelostemma pulchellum (Salisb.) Heller Bluedicks
[=Hookera pulchella Salisb.;
Brodiaea pulchella (Salisb.) Greene;
B. capitata Benth.]
Bates Wash(JCB), Yucca Mtn.(O&C).

Cyperaceae Sedge Family

Carex

Carex praeegracilis W. Boott
Specie Spring(UNLV-C), Forty-Mile Wash(UNLV-C).

Liliaceae Lily Family

Calochortus

Calochortus flexuosus S. Wats.
Crater Flat(JCB), Tarantula Canyon(UNLV), Specie Spring(UNLV),
Chuckwalla Canyon(UNLV), Yucca Mtn.(O&C,UNLV), Beatty Wash(UNLV),
Solitario Canyon(UNLV).

Poaceae Grass Family

Aristida

Aristida adscensionis L. Sixweeks threeawn
[=A. oligantha authors]
Bare Mtn.(JCB).

Aristida purpurea Nutt. Purple threeawn

[=A. fendleriana Steudel;
A. glauca (Nees) Walp;
A. longiseta Steudel;
A. wrightii Nash]

Bare Mtn.(JCB), Black Marble Mtn.(UNLV), Bates Wash(UNLV), Busted Butte(UNLV), Chuckwalla Canyon(UNLV), Solitario Canyon(UNLV), canyon north of Wildcat Peak(UNLV-C).

Bromus

Bromus rubens L.

Red brome

Black Marble Mtn.(UNLV), Chuckwalla Canyon(UNLV-C), Specie Spring(UNLV), Fluorspar Canyon(UNLV), Bates Wash(UNLV), Tarantula Canyon(UNLV), Yucca Mtn.(O&C,UNLV), Busted Butte(UNLV), Forty-Mile Wash(UNLV), Beatty Wash(UNLV).

Bromus tectorum L.

Cheatgrass

Chuckwalla Canyon(UNLV-C), Specie Spring(UNLV-C), Fluorspar Canyon(UNLV), Bates Wash(UNLV), Tarantula Canyon(UNLV), Yucca Mtn.(UNLV), Beatty Wash(UNLV-C), canyon north of Wildcat Spring(UNLV).

Bromus trinii Desv.

Chilean chess

Bare Mtn.(JCB), Yucca Mtn.(UNLV-C), Busted Butte(UNLV-C), Solitario Canyon(UNLV-C).

Elymus

Elymus elymoides (Raf.) Sweaey

Squirreltail

[=Sitanion elymoides Raf.;
Aegilops hystrix Nutt.
S. hystrix (Nutt.) J.G. Sm.;
S. breviaristatum J.G. Sm.;
S. cinereum J.G. Sm.;
S. insulare J.G. Sm.]

Chuckwalla Canyon(UNLV), Bates Wash(UNLV), Crescent Cliff(UNLV), Tarantula Canyon(UNLV), Yucca Mtn.(UNLV-C), Beatty Wash(UNLV-C), Solitario Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Elymus trachycaulus (Link) Gould ex Shinn.

Slender wheatgrass

[=Agropyron trachycaulum (Link) Malte;
A. latigume (Scribn. & Sm.) Rydb.;
A. pauciflorum (Schwein) sensu A.S. Hitchc.;
A. subsecundum (Link) A.S. Hitchc.;
A. tenerum Vasey;
A. violaceum not (Hornem.) Lange;
A. violaceum var. andinum Scribn. Sm.]

Specie Spring(UNLV).

Elymus triticoides Buckley

[=Leymus triticoides (Buckley) Pilger]
Beatty Wash (UNLV)

Erioneuron

Erioneuron pulchellum (HBK) Tateoka

Fluffgrass

[=Triodia pulchella H.B.K.;
Tridens pulchellus (H.B.K.) A.S. Hitchc.]

Crater Flat(UNLV), Chuckwalla Canyon(UNLV), Yucca Mtn.(UNLV), Busted Butte(UNLV), Beatty Wash(UNLV), Solitario Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Hilaria

Hilaria jamesii (Torr.) Benth.

Galleta, curlygrass

[=Pleuraphis jamesii Torr.]

Chuckwalla Canyon(UNLV), Bates Wash(UNLV), Crescent Cliff(UNLV-C),
Tarantula Canyon(UNLV), Yucca Mtn.(O&C,UNLV-C), Beatty Wash(UNLV),
Solitario Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Muhlenbergia

Muhlenbergia porteri Scribn. ex Beal Bush muhly
[=M. texana Thurber]
Chuckwalla Canyon(UNLV), canyon north of Wildcat Peak(UNLV-C).

Poa

Poa bigelovii Vasey and Scribn. Bigelow's bluegrass
Chuckwalla Canyon(UNLV-C).

Poa fendleriana (Steud.) Vasey Muttongrass
[=Eragrostis fendleriana Steudel;
P. cusickii Vasey;
P. epilis Scribn;
P. longiligula Scribn. & Williams;
P. eatonii Wats.;
P. scabriuscula Williams]
Chuckwalla Canyon(UNLV), Specie Spring(UNLV), Bates Wash(UNLV),
Crescent Cliff(UNLV-C), Tarantula Canyon(UNLV), Yucca Mtn.(UNLV).

Poa secunda Presl. Sandberg's bluegrass
[=P. ampla Merr.;
P. brachyglossa Piper;
P. canbyi (Scribn.) Howell;
P. confusa Rydb.;
P. gracillima Vasey;
P. juncifolia authos not Scribn.;
P. nevadensis Vasey;
P. sandbergii Vasey;
P. scabrella (Thurber) Benth.;
Atropis laevis var. rigida Beal]
Beatty Wash(UNLV-C).

Polypogon

Polypogon monspeliensis (L.) Desf. Annual beardgrass
[=Alopecurus monspeliensis L.]
Forty-Mile Wash(UNLV-C).

Schismus

Schismus arabicus Nees. Mediterranean grass
Crater Flat(UNLV), Busted Butte(UNLV-C), Solitario Canyon(UNLV),
Yucca Mtn.(O&C).

Sporobolus

Sporobolus cryptandrus (Torr.) A. Gray Sand dropseed
[=Vilfa cryptandra Torr.]
Beatty Wash(UNLV-C).

Stipa

Stipa arida M. E. Jones Mormon needlegrass
[=S. mormonum Mez.]
North Bare Mtn.(JCB), canyon north of Wildcat Peak(UNLV-C).

Stipa x bloomeri Bolander Bloomer's ricegrass
[=Oryzopsis bloomeri (Bolander) Ricker]
Canyon north of Wildcat Peak(UNLV-C), Yucca Mtn.(O&C).

Stipa comata Trin & Rupr. Needle-and-thread grass
Crater Flat(UNLV), Tarantula Canyon(UNLV), Chuckwalla Canyon(UNLV),

Yucca Mtn.(UNLV), Busted Butte(UNLV), Beatty Wash(UNLV), Solitario Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Stipa coronata Thurb. in S. Wats. Crested needlegrass
Beatty Wash(UNLV).

Stipa hymenoides R. & S. Indian ricegrass
[=Oryzopsis hymenoides (Roem. & Schult.) Ricker]
Steves Pass(UNLV), Black Marble Mtn.(UNLV), Crater Flat(UNLV),
Chuckwalla Canyon(UNLV), Bates Wash(UNLV), Tarantula Canyon(UNLV),
Yucca Mtn.(O&C,UNLV), Busted Butte(UNLV), Beatty Wash(UNLV),
Solitario Canyon(UNLV), canyon north of Wildcat Peak(UNLV).

Stipa speciosa Trin. & Rupr. Desert needlegrass
[=Achnatherum speciosum (Trin. & Rupr.) Barkworth]
Chuckwalla Canyon(UNLV), Specie Spring(UNLV), Fluorspar
Canyon(UNLV), Yucca Mtn.(O&C,UNLV-C), Bates Wash(UNLV-C), Tarantula
Canyon(UNLV), Busted Butte(UNLV), Beatty Wash(UNLV), canyon north of
Wildcat Peak(UNLV).

Tridens

Tridens muticus (Torr.) Nash Slim tridens
[=Tricuspis mutica Torr.;
Triodia mutica (Torr.) Scribn.]
Canyon north of Wildcat Peak(UNLV-C).

Vulpia

*Vulpia bromoides (L.) S. F. Gray
[=Festuca bromoides L.;
F. dertonensis (All.) Asch. & Graebner]
Crescent Cliff(UNLV-C), Yucca Mtn.(O&C).

Vulpia octoflora (Walt.) Rydb. Sixweeks fescue
[=Festuca octoflora var. hirtella (Piper) Henrard]
Crescent Cliff(UNLV), Yucca Mtn.(UNLV), Busted Butte(UNLV-C), Beatty
Wash(UNLV-C).

Typhaceae Cat-tail Family

Typha

Typha latifolia L. Broad-leaved cattail
[=Massula latifolia (L.) Dulac]
Forty-Mile Wash(UNLV).

Figure 3. *Senecio douglassi* DC. var. *monoensis* (Greene) Jepson. A shrub at the base of a limestone cliff on Busted Butte (Nevada Test Site), occasional in similar habitats, or in washes or disturbed sites throughout the area.

Figure 4. *Sclerocactus polyancistrus* (Engelm.) & Bigel.) Britton & Rose. An occasional perennial in the welded volcanic tuffs atop Yucca Mountain; found elsewhere in the study area in canyons and on gravelly hillsides.

Figure 5. *Phacelia perityloides* Cov. var. *jaegeri* Munz. A perennial herb known in the study area only from limestone rock crevices of certain north-facing canyon walls of Bare Mountain.

Figure 6. *Gilia ripleyi* Barneby. A perennial herb, rare in limestone talus, canyon north of Wildcat Peak (Bare Mountain); occasional elsewhere on certain limestone mountain ranges on the Nevada Test Site.

Figure 7. *Mimulus bigelovii* (A. Gray) A. Gray var. *cuspidatus* A. L. Grant. An occasional to common annual, widely distributed in the area on rocky slopes and in sandy-gravelly washes.

Figure 8. *Penstemon floridus* Bdg. var. *austinii* (Eastw.) N. Holmgren. Occasional local populations of this perennial herb occur in the gravels of Forty-mile Wash (Nevada Test Site), Chuckwalla Canyon (Bare Mountain), and Beatty Wash.

SUMMARY

Results of this survey, combined with those presented by other workers, indicate that the vascular flora of Yucca Mountain and vicinity is composed of 325 specific and infraspecific taxa. These taxa are representative of 162 genera and 53 families. Eight of the species have not previously been reported as occurring in the area. The annual component of this flora is likely under-represented in this tabulation. A paucity of precipitation during the winter months preceding this study largely excluded the growth of annuals. The three families represented by the largest number of species are the sunflower or Asteraceae, with 64 species; the borage or Boraginaceae, 34 species; and the grass or Poaceae, 26 species.

No threatened or endangered taxon, currently listed under the Endangered Species Act, was recorded from the study area. Additional distributional data relative to those candidate species that do occur within the area has been incorporated in the annotated checklist. The first report of the presence of *Gilia ripleyi* on the east side of Bare Mountain is notable.

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