

**A Preliminary Checklist  
of Plant Species  
for the Southern Foothills  
of the Sacramento Mountains,  
Otero County, New Mexico**



**Agricultural Experiment Station • Research Report 721  
College of Agriculture and Home Economics**

## **ACKNOWLEDGMENTS**

The authors acknowledge financial support from the Directorate of the Environment, Natural Resources Division, Ft. Bliss, TX, and U.S. Construction Engineering Research Laboratory, Champaign, IL.

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# A Preliminary Checklist of Plant Species for the Southern Foothills of the Sacramento Mountains, Otero County, New Mexico

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A field study was conducted from June through September 1993 to inventory vegetation in and around ephemeral drainages in the Sacramento Mountains. The primary purpose was to describe vegetation for ephemeral drainages and evaluate drainage type, elevation, and position of the main channel relative to the surrounding watershed on the vegetation. Plant foliar cover, density, and species presence were measured in several sample locations. In the process, an extensive plant species list was developed for the area. It is presented here as a checklist of species for the southern foothills of the Sacramento Mountains. It is not intended to be a complete species list for all the foothills, but to provide a basis on which botanists and plant lovers can expand.

## LOCATION

The study area is located in Otero County on a portion of McGregor Range (Ft. Bliss Military Reserve) administered by the Bureau of Land Management (BLM) as a wilderness study area (fig. 1). The area is situated south of the main crest of the Sacramento Mountains in Range 11 East, Township 20 South. This area borders the Lincoln National Forest on the north and is approximately 16 air km northeast from the village of Orogrande. Elevations range from 1,200 m to 1,600 m.

The study area is dissected by a large ephemeral drainage, Culp Canyon, that flows westerly from the foothills of the Sacramento Mountains to the Tularosa Basin (fig. 2). Four smaller ephemeral drainages were selected. Two of these (Indy and Carly) feed into Culp Canyon from headwaters on the north edge of Otero Mesa. The other two (Alien Temple and Four Bucks)

develop in Culp Canyon and flow into the Tularosa Basin. The drainages are encompassed by a 12,955 ha (32,000 ac) grazing allotment administered by the BLM (fig. 2). Alien Temple and Four Bucks drainages dissect a submesa between the foothills and the Tularosa Basin. This area is desert grassland and uplands dominated by creosotebush. Indy and Carly drainages occupy a transition zone where blue grama (*Bouteloua gracilis*) is prominent on alluvial soils, and bunchgrasses and a high diversity of shrubs occupy the uplands (fig. 2).

## CLIMATE

McGregor Range has a variable, semiarid climate influenced by moist air masses from the Gulf of Mexico and the Pacific Ocean (BLM 1980). The annual temperature across McGregor Range averages 16.7°C (62°F) at lower elevation stations (BLM 1980). The growing season extends from April to November (BLM 1980).

Precipitation averages 20-25 cm annually at lower elevations, and increases to 40+ cm in the mountain foothills. Rain gauges were established throughout McGregor Range in 1971. One of these is located in the center of the study area. The BLM recorded 38.6 cm (15.2 in) average annual rainfall at this location (from 1971 to 1979). The maximum rainfall recorded for the location was 52.3 cm (20.6 in), and the minimum was 28.2 cm (11.1 in). Locally, summer thunderstorms are influenced by the Sacramento Mountains (personal observation). Most of the precipitation occurs from July to September (BLM 1980).

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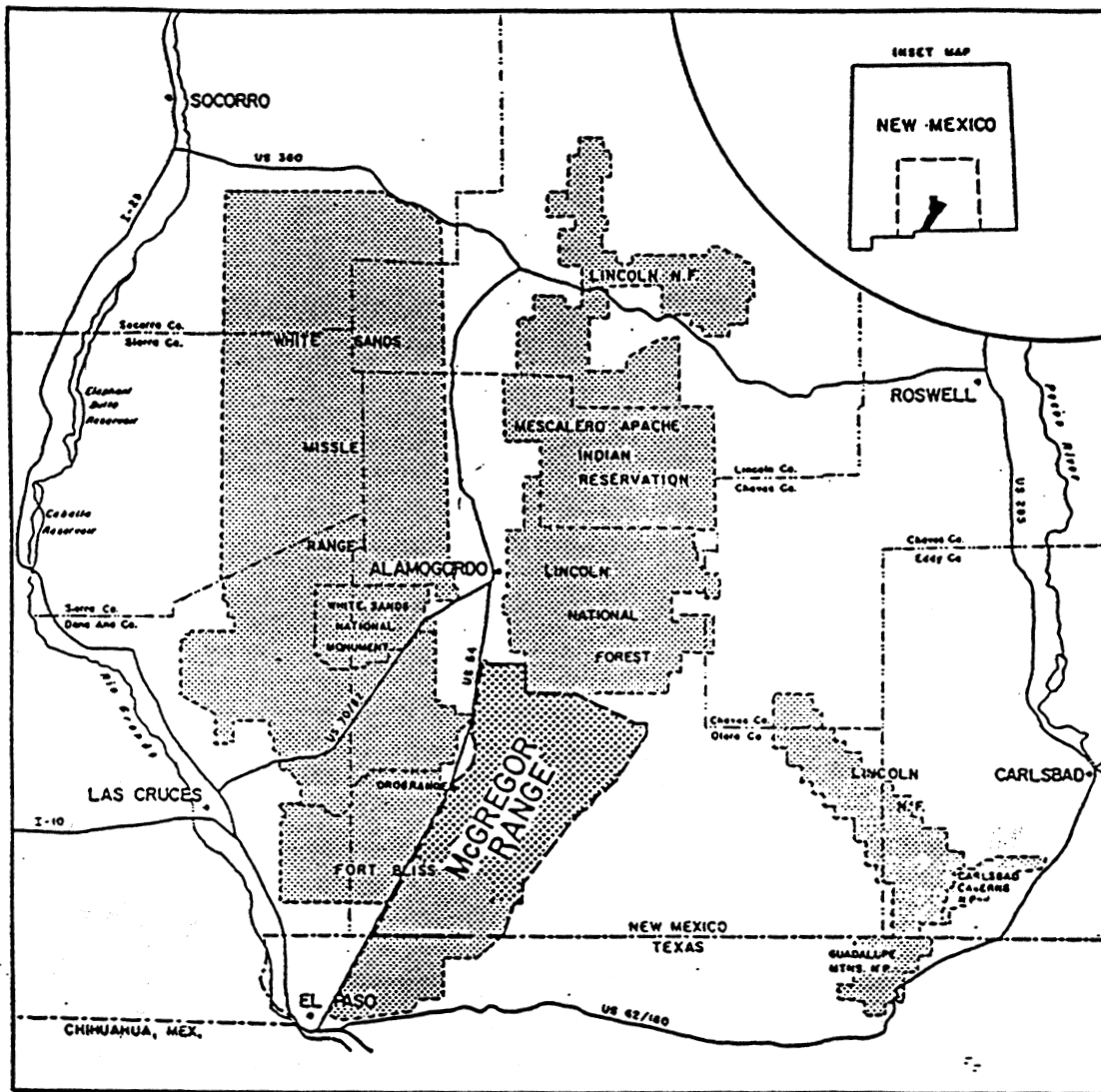


Figure 1. The study area is located in Otero County in southern New Mexico on the north end of McGregor Range.

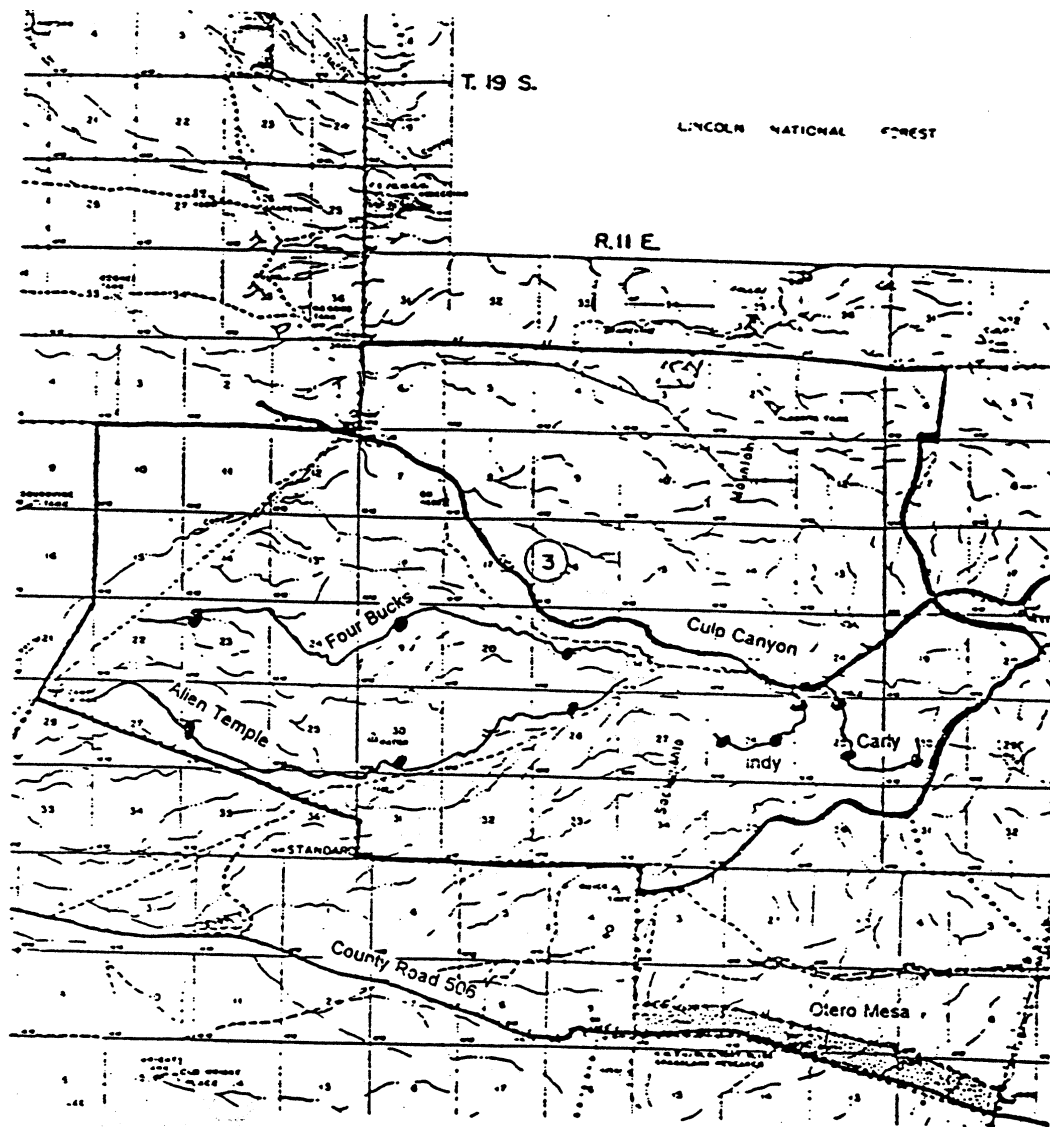


Figure 2. The study area includes approximately 12,950 ha and is situated in a Bureau of Land Management grazing allotment. It is dissected by a large drainage, Culp Canyon, that flows westerly from the foothills of the Sacramento Mountains to the Tularosa Basin. Indy and Carly drainages (located in the foothills) feed into Culp Canyon from headwaters on the north edge of Otero Mesa. Alien Temple and Four Bucks drainages headwater in Culp Canyon and flow into the Tularosa Basin. Scale: Grids represent 1.6 km x 1.6 km. Source: Bureau of Land Management grazing allotment map. Dots show the location of sample areas in upper, middle, and lower elevational zones.

## SOILS, VEGETATION, AND RANGE SITES

In general, soils of the area are well drained, calcareous, and frequently influenced by run off from exposed bedrock, surface cobbles, and catsteps. Whole soil mapping units are classified thermic, but may include pockets of mesic soil.

Of particular interest among soils and range sites is the overlap of Southern Desert (SD-2 and) and Canadian Plains (CP-4) classifications (table 1). The drainages are located in an ecotone that represents an important transition from the Tularosa Basin to the Sacramento Mountains. The Southern Desert range sites are influenced by an arid climate and support xeric species, most of which are warm season. The Canadian Plains range sites are influenced by a more mesic climate and support a mixture of warm and cool season plants.

The Southern Desert range sites are located on the submesa area of the study. The Canadian Plains range sites are located in the foothills. The drainages' vegetation corresponds to arroyo riparian vegetation of Dick-Peddie (1993). The apache plume series is similar to portions of this study's drainages.

## NOMENCLATURE

Plants were identified to the species level unless adequate plant material was not available. Primary references used to identify grasses were Allred (1993) and Hitchcock and Chase (1950). Primary references used to identify forbs, half-shrubs, shrubs, and trees were Correll and Johnston (1970), Martin and Hutchins (1980), and Powell (1988). Britton and Rose (1963) was used as the primary reference for cacti. Other references were used for vernacular names. Many species were vouchered and placed in the NMSU Range Science Herbarium. Vernacular names follow Soil Conservation Service (1982).

A total of 245 species, 153 genera, and 53 families were inventoried in the study area (table 2). Species richness was greater in the foothill drainages than in the submesa drainages for all species and for forbs and grasses. The number of shrubs and trees increased with elevation along the drainages. Families with the greatest number of species were the Poaceae with 47 (19.2%) and the Asteraceae with 40 (16.3%).

**Table 1. The study area's soils, range sites, and soil families.**

Soil symbol — Name	Range site	Family or higher taxon
LOD — Lozier-Rock Outcrop 20-50% slope	Limestone Hills (SD-2)	Loamy-skeletal, carbonatic, thermic Lithic Calciorthids
NTD — Nickel strong slope	Gravelly (SD-2)	Loamy-skeletal, mixed, thermic Typic Calciorthids
NTD — Tencee strong slope	Gravelly (SD-2)	Loamy-skeletal, carbonatic, thermic, shallow Typic Paleorhids
RRF — Rock Outcrop-Lozier 20-65% slope	Limestone Hills (SD-2)	None
ECF — Ector-Rock Outcrop 20-50% slope	Limestone Hills (CP-4)	Loamy-skeletal, carbonatic, thermic Lithic Calcicustolls

**Table 2. List of plant species inventoried in the study area.**

Family name	SCS Acronym	Scientific name	Vernacular name
<b>Agavaceae</b>	AGNE4	<i>Agave neomexicana</i> Wooton & Standl.	New Mexico agave
<b>Anacardiaceae</b>	RHTRX*	<i>Rhus trilobata</i> x <i>microphylla</i>	Hybrid sumac
	RHTR	<i>Rhus trilobata</i> Nutt.	Large leaf sumac
	RHMI3	<i>Rhus microphylla</i> Engelm.	Littleleaf sumac
<b>Apocynaceae</b>	AMSA2	<i>Amsonia longiflora</i> Torr.	Tubular slim-pod
<b>Asclepiadaceae</b>	ASCLE	<i>Asclepias</i> spp. L.	Milkweed
	SACR3	<i>Sarcostemma crispum</i> benth.	Climbing milk-weed
<b>Asteraceae</b>	BAAB	<i>Bahia absinthifolia</i> Benth.	Yerba raton
	ZIAC	<i>Zinnia acerosa</i> (DC.) Gray	Spinyleaf zinnia
	VIST	<i>Viguera stenoloba</i> Blake	Skeletonleaf goldeneye
	VEEN	<i>Verbesina encelioides</i> (Cav.) Benth. & Hook. ex Gray	Cowpen daisy
	ARLU	<i>Artemisia ludoviciana</i> Nutt.	Louisiana sagewort
	ACWR5	<i>Acourtia wrightii</i> (Gray) Reveal & R.M. King	Brownfoot
	LEER	<i>Leucelene ericoides</i> (Torr.) Grene	Babywhite aster
	HAPLO2	<i>Haplopappus</i> spp. Cass.	Goldenweed
	GYGL	<i>Gymnosperma glutinosum</i> (Spreng.) Less.	Tatalencho
	ERFL	<i>Erigeron flagellaris</i> Gray	Trailing fleabane
	GUSA2	<i>Gutierrezia sarothrae</i> (Pursh) Britton & Rusby	Broom snakeweed
	BAPE	<i>Bahia pedata</i> Gray	Bluntscale bahia
	BAPT	<i>Baccharis pteronioides</i> DC.	Yerba de pasmo
	THLO	<i>Thelesperma longipes</i> Gray	Greenthread
	DYTH	<i>Dyssodia thurberi</i> (Gray) B. Rob	Thurber's dogweed
	LYJU	<i>Lygodesmia juncea</i> (Pursh.) D. Don ex Hook.	Skeletonplant
	CONYZ	<i>Conyza</i> spp. Less.	Conyza
	ISWR	<i>Isocoma wrightii</i> (Gray) Rydb.	Jimmyweed
	SAAB	<i>Sanvitalia abertii</i> Gray	Abert's dome
	GUMI	<i>Gutierrezia microcephala</i> (DC.) Gray	Threadleaf snakeweed
	MABL2	<i>Machaeranthera blepharophylla</i> (Gray) Shinnars	Naked goldenweed
	BRBR2	<i>Brickellia brachyphylla</i> (Gray) Gray	Guadalupe brickellia
	BRLA	<i>Brickellia laciniata</i> Gray	Cutleaf brickelbush
	BRVE	<i>Brickellia veronicaefolia</i> Annotated by R. Turner, Austin, TX	Chihuahua brickellia
	MASO4	<i>Margaranthus solanaceus</i> Schlecht.	False ground-cherry
	MAPI	<i>Machaeranthera pinnatifida</i> (Hook.) Shinnars	Cutleaf goldenweed
	HEAN2	<i>Helianthus annuus</i> L.	Annual sunflower
	HYSC2	<i>Hymenoxys scaposa</i> (DC.) K. Parker	Clustered bitterweed
	PSTA	<i>Psilostrophe tagetina</i> (Nutt.) Greene	Woolly paper-flower
	FLCE	<i>Flourensia cernua</i> DC.	Tarbush
	MATA2	<i>Machaeranthera tanacetifolia</i> (H.B.K.) Nees	Tansyleaf spine aster
	HYMO	<i>Hymenoclea monogyra</i> Torr. & Gray	Burrobush
	MELE2	<i>Melempodium leucanthum</i> Torr. & Gray	Rough blackfoot
DYAC	<i>Dyssodia acerosa</i> DC.	Prickleleaf dogweed	
PEFE	<i>Penstemon fendleri</i> Torr. & Gray	Fenler penstemon	
PAIN2	<i>Parthenium incanum</i> H.B.K.	Mariola	
CIUN	<i>Cirsium undulatum</i> (Nutt.) Spreng.	Wavyleaf thistle	
CHPU4	<i>Chrysothamnus pulchellus</i> (Gray) Greene	Southwest rabbitbush	

\*Acronym provided is not listed in the SCS (1984) publication.

**Table 2. Continued**

Family name	SCS Acronym	Scientific name	Vernacular name
<b>Berberidaceae</b>	BEHA	<i>Berberis haematocarpa</i> Wooton	Algerita
<b>Bignoniaceae</b>	CHLI2	<i>Chilopsis linearis</i> (Cav.) Sweet	Desert willow
<b>Boraginaceae</b>	LESQU	<i>Lesquerella</i> spp. S. Wats.	Bladderpod
	LIMU3	<i>Lithospermum multiflorum</i> Torr. ex Gray	Multiflower puccoon
	COCA2	<i>Coldenia (Tiquilia) canescens</i> DC.	Spreading coldenia
	LIIN2	<i>Lithospermum multiflorum</i> Torr. ex Gray	Multiflower puccoon
	COGR	<i>Coldenia greggii</i> (Torr. & Gray) Gray	Plume coldenia
	CRJA2	<i>Cryptantha jamesii</i> (Torr.) Payson	James cryptanth
<b>Brassicaceae</b>	NECA3	<i>Nerisyrenia camporum</i> (Gray) Greene	Bicolor greggia
	ERCA14	<i>Erysimum capitatum</i> (Dougl. ex Hook.) Greene	Western wall-flower
<b>Cactaceae</b>	COVI9	<i>Coryphantha vivipara</i> (Nutt.) Britton & Rose	Spiny star
	OPPO	<i>Opuntia polyacantha</i> Haw.	Starvation cactus
	COST	<i>Coryphantha strobiliformis</i> (Poselg.) Orcutt	Cob cory cactus
	COMA2	<i>Coryphantha (Mammillaria) macromeris</i> (Engelm.) Lem.	Nipple beehive
	CSDG*	<i>Cactus seedling</i>	
	OPIM	<i>Opuntia imbricata</i> (Haw.) DC.	Tree cholla
	OPPHM	<i>Opuntia phaeacantha</i> var. <i>major</i> Engelm./Engelm.	Major prickly pear
	ECLL	<i>Echinocereus lloydii</i> Britton & Rose	Lloyd's hedgehog
	EPITH	<i>Mammillaria lasiacantha</i> Engelm.	Golf ball pincushion
	OPLE	<i>Opuntia leptocaulis</i> DC.	Christmas cholla
	OPPH	<i>Opuntia phaeacantha</i> Engelm.	Purple-fruited prickly pear
	ECTR	<i>Echinocereus triglochidiatus</i> Engelm.	Claret-cup hedgehog
	ECHO	<i>Echinocactus horzonthalonius</i> Lem.	Blue barrel
	ECCH	<i>Echinocereus chloranthus</i> (Engelm.) Engelm. ex Ruempl.	Brown-spine hedgehog
<b>Capparidaceae</b>	KOSP	<i>Koberlinia spinosa</i> Zuccar.	Allthorn
<b>Caryophyllaceae</b>	PAJA	<i>Paronchia jamesii</i> Torr. & Gray	Jame's nailwort
<b>Chenopodiaceae</b>	CHAL7	<i>Chenopodium album</i> L.	Lamb's quarter
	CHIN2	<i>Chenopodium incanum</i> (S. Wats.) A. Heller	Goose-foot
	ATCA2	<i>Atriplex canescens</i> (Pursh) Nutt.	Fourwing saltbush
	EULA5	<i>Eurotia lanata</i> (Pursh) Moq.	Common winterfat
<b>Convolvulaceae</b>	IPLI	<i>Ipomoea lindheimeri</i> Gray	Blue morning glory
	COEQ	<i>Convolvulus equitans</i> Benth.	Texas bindweed
	EVPI	<i>Evolvulus pilosus</i> Nutt.	Silver morning glory
<b>Cornaceae</b>	GAOVG	<i>Garrya ovata</i> subsp. <i>goldmanii</i> Benth. (Wooton & Standl.) G. Y. Dahling	Mexican silktassel
<b>Cucurbitaceae</b>	CUFO	<i>Cucurbita foetidissima</i> H.B.K.	Buffalo gourd
	IBTE	<i>Ibervillea tenuisecta</i> (Gray) Small	Globeberry
<b>Ephedraceae</b>	EPVI	<i>Ephedra viridis</i> Coville	Green ephedra
<b>Euphorbiaceae</b>	EUGL3	<i>Euphorbia glyptosperma</i> Engelm.	Ridgeseed spurge
	EULA3	<i>Euphorbia lata</i> Engelm.	Hoary spurge

\*Acronym provided is not listed in the SCS (1984) publication.

**Table 2. Continued**

Family name	SCS Acronym	Scientific name	Vernacular name
	CRDI6	<i>Croton dioicus</i> Cav.	New Mexico croton
	EUPHO	<i>Euphorbia</i> spp. L.	Spurge
	EURE4	<i>Euphorbia revoluta</i> Engelm.	Rolled spurge
	EUSE6	<i>Euphorbia serrula</i> Engelm.	Sawtooth spurge
	EUGE	<i>Euphorbia geyeri</i> Engelm.	Geyer spurge
	PHPO3	<i>Phyllanthus polygonoides</i> Nutt. ex Spreng.	Leaf-flower
	TRST	<i>Tragia stylaris</i> Muell.Arg.	Noseburn
<b>Fabaceae</b>	PRGL2	<i>Prosopis glandulosa</i> Torr.	Honey mesquite
	PESC3	<i>Petaria scoparia</i> Gray	Camote del monte
	MIBO2	<i>Mimosa borealis</i> Gray	Fragrant mimosa
	CABA6	<i>Cassia bauhinioides</i> Gray	Bauhin senna
	RHTE	<i>Rhynchosia texana</i> Torr. & Gray	Texas snoutbean
	DAFO	<i>Dalea formosa</i> Torr.	Feather dalea
	DAJA	<i>Dalea jamesii</i> (Torr.) Torr. & Gray	James dalea
	ASTRAG	<i>Astragalus</i> spp. L.	Locoweed
	ASNU4	<i>Astragalus nuttallianus</i> DC.	Nuttall milkvetch
	HOJA	<i>Hoffmanseggia jamesii</i> Torr. & Gray	Jame's hog-potato
<b>Fouquieriaceae</b>	FOSP2	<i>Fouquieria splendens</i> Engelm.	Ocotillo
<b>Hydrophyllaceae</b>	NAHI	<i>Nama hispidum</i> Gray	Rough poolmat
	PHIN2	<i>Phacelia intermedia</i> Wooton	Bluecurls
<b>Krameriaceae</b>	KRLA	<i>Krameria lanceolata</i> Torr.	Trailing krameria
<b>Lamiaceae</b>	HEPU12	<i>Hedeoma pulcherrimum</i> Woon & Standl.	Mock-pennyroyal
	SACYH	<i>Sarcostemma cynanchoides</i> var. <i>hartwegii</i> Decne./(Vail) Shinnery	Arroyo twin-vine
	SALY	<i>Salvia lycioides</i> Gray	Canyon sage
	SADA2	<i>Salvia davidsonii</i> Greenm.	David's mint
	HEHY	<i>Hedeoma hyssopifolium</i> Gray	Sweet scent
<b>Liliaceae</b>	ALCE2	<i>Allium cernuum</i> Roth	Nodding onion
	YUTO	<i>Yucca torreyi</i> J. A. Shafer	Torrey's yucca
	YUEL	<i>Yucca elata</i> Engelm.	Soaptree yucca
	YUBA	<i>Yucca bacatta</i> Torr.	Banana yucca
	DASYL	<i>Dasyllirion</i> spp. Zuccar.	Sotol
	NOTE	<i>Nolina texana</i> S.Wats.	Texas sacahuiste
<b>Linaceae</b>	LILE3	<i>Linum lewisii</i> Pursh	Lewis flax
	LIPU4	<i>Linum puberulum</i> (Engelm.) A. Heller	Plains flax
<b>Malvaceae</b>	ABWR	<i>Abutilon wrightii</i> Gray	Wright abutilon
	SPCO	<i>Sphaeralcea coccinea</i> (Nutt.) Rydb.	Scarlet globemallow
	SPSU	<i>Sphaeralcea subastata</i> coult.	Wrinkled globemallow
	SPHAE	<i>Sphaeralcea</i> ST.-Hil	Gloemallow
<b>Mimosaceae</b>	ACCO2	<i>Acacia constricta</i> Benth.	Mescat acacia
<b>Nyctaginaceae</b>	CYGY	<i>Cyphomeris gypsophiloides</i> (M. Mart. & Gale.) Standl.	Red cyphomeris
	MIOX	<i>Mirabilis oxybaphoides</i> (Gray) Gray	Oxybaphus four o'clock
	ALIN	<i>Allionia incarnata</i> L.	Pink windmills

**Table 2. Continued**

Family name	SCS Acronym	Scientific name	Vernacular name
	MIMU	<i>Mirabilis multiflora</i> (Torr.) Gray	Desert four o'clock
	MILI3	<i>Mirabilis linearis</i> (Pursh) Heimerl.	Ribbon four o'clock
<b>Oleaceae</b>	MESC	<i>Menodora scabra</i> Gray	Rough twinpod
<b>Onagraceae</b>	OEBR	<i>Oenothera brachycarpa</i> Gray	Longfin evening primrose
<b>Pinaceae</b>	PIED	<i>Pinus edulis</i> Engelm.	Pinyon pine
	JUMO	<i>Juniperus monosperma</i> (Engelm.) Sarg.	One-seed juniper
<b>Plantaginaceae</b>	PLPAG	<i>Plantago patagonica gnaphalioides</i> Jacq./ (Nutt.) Gray	Woolly plantain
<b>Poaceae</b>	LYSE*	<i>Lycurus setosus</i> (Nutt.) C.Reeder	Wolftail
	ERPU8	<i>Erioneuron pulchellum</i> (H.B.K.) Tateoka	Fluffgrass
	HIMU2	<i>Hilaria mutica</i> (Buckley) Benth.	Tobosa grass
	ERPI5	<i>Erioneuron pilosum</i> (Buckley) Nash	Hairy tridens
	GCOT*	Grass cotyledon	
	ARFE4	<i>Aristida purpurea</i> var. <i>fendleri</i> Nutt./Vasey	Fendler's threeawn
	MUEM	<i>Muhlenbergia emersleyi</i> Vasey	Bullgrass
	MUFI	<i>Muhlenbergia filiculmis</i> Vasey	Slimstem muhly
	MUHLE	<i>Muhlenbergia</i> spp. Schreb.	Muhly
	MUPA2	<i>Muhlenbergia pauciflora</i> Buckley	New Mexico muhly
	MUPO2	<i>Muhlenbergia porteri</i> Scribn. ex W. J. Beal	Bush muhly
	MUPU2	<i>Muhlenbergia pungens</i> Thurb.	Sandhill muhly
	MURE	<i>Muhlenbergia repens</i> (J.Presl.) A. Hitchc.	Creeping muhly
	MUSE	<i>Muhlenbergia setifolia</i> Vasey	Curlyleaf muhly
	MUTO2	<i>Muhlenbergia torreyi</i> (Kunth) A. Hitchc. EX Bush.	Ring muhly
	ERIN	<i>Eragrostis intermedia</i> A. Hitchc.	Plains lovegrass
	BOGR2	<i>Bouteloua gracilis</i> (H.B.K.) Lag. ex Griffiths	Blue grama
	BOHI2	<i>Bouteloua hirsuta</i> Lag.	Hairy grama
	BOLI2	<i>Boerhavia linearifolia</i> Gray	Narrowleaf spiderling
	ENDE	<i>Enneapogon desvauxii</i> Beauv.	Spike pappusgrass
	ELLO*	<i>Elymus longifolius</i> (Smith) Gould	Longleaf squirreltail
	DICA8	<i>Digitaria californica</i> (Benth.) Henr.	Arizona cottontop
	STIPA1*	<i>Stipa viridula</i> Trin.	Green needlegrass
	SPORO	<i>Sporobolus</i> spp. R.Br.	Dropseed
	SPGI	<i>Sporobolus giganteus</i> Nash	Giant dropseed
	BOBA3	<i>Bothriochloa barbinodes</i> (Lag.) Herter	Cane bluestem
	PAHA	<i>Panicum hallii</i> Vasey	Hall's panicum
	SPCR	<i>Sporobolus cryptandrus</i> (Torr.) Gray	Sand dropseed
	ARIST	<i>Aristida</i> spp. L.	Threeawn
	ARPU9	<i>Aristida purpurea</i> Nutt.	Purple threeawn
	TRNE2	<i>Tridens nealleyi</i> (Vasey) Wooton & Standl.	Nealley tridens
	PENA	<i>Perezia nana</i> Gray	Desert holly
	TRMU	<i>Tridens muticus</i> (Torr.) Nash	Slender tridens
	SPCO4	<i>Sporobolus contractus</i> A. Hitchc.	Spike dropseed
	TRIDE	<i>Tridens</i> spp. Roem. & J. A. Schultes	Tridens
	TRBE	<i>Tragus berteronianus</i> J. A. Schultes	Spike burgrass
	SCBR2	<i>Scleropogon brevifolius</i> Philippi	Burograss
	BOBA2	<i>Bouteloua barbata</i> Lag.	Sixweeks grama
	SELE6	<i>Setaria leucopila</i> (Scribn. & Merrill) K. Schum.	Plains bristlegrass
	BOBR	<i>Bouteloua breviseta</i> Vasey	Gyp grama

\*Acronym provided is not listed in the SCS (1984) publication.

**Table 2. Continued**

Family name	SCS Acronym	Scientific name	Vernacular name
	STIPA2*	<i>Stipa viridula/robusta</i> (Vasey) Scribn.	Sleepygrass
	BOUTE	<i>Bouteloua</i> spp. Lag. Mut. Lag.	Grama
	BOER4	<i>Bouteloua eriopoda</i> (Torr.) Torr.	Black grama
	BOCU	<i>Bouteloua curtipendula</i> (Michx.) Torr.	Sideoats grama
	STIPA3*	<i>Stipa robusta/eminens/tenuissima</i> Cav./Trin.	Southwestern needlegrass
<b>Polemoniaceae</b>	GIRIA	<i>Gilia rigidula</i> var. <i>acerosa</i> Benth./Gray Wherry	Needleleaf gilia
	PHTR	<i>Phlox triovulata</i> Thurb. ex Torr.	Phlox
	IPLO2	<i>Ipomopsis longiflora</i> (Torr.) V. Grant	Paleflower gilia
	GIRI	<i>Gilia rigidula</i> Benth.	Spreading gilia
<b>Polygalaceae</b>	POSC2	<i>Polygala scoparioides</i> Chodat	Small-flowered milkwort
	POOB	<i>Polygala obscura</i> Benth.	Veiledseed milk-wort
	POMA7	<i>Polygala macradenia</i> Gray	Mat milkwort
	POAL4	<i>Polygala alba</i> Nutt.	White milkwort
<b>Polygonaceae</b>	ERJA	<i>Eriogonum jamesii</i> Benth.	Jame's wild-buckwheat
	ERHI3	<i>Eriogonum hieracifolium</i> Benth.	Hawkweed wild-buckwheat
<b>Polypodiaceae</b>	NOCO2	<i>Notholaena cochisensis</i> Goodd.	Cloak fern
<b>Portulacaceae</b>	TAAU	<i>Talinum aurantiacum</i> Engelm.	Orange flameflower
<b>Portulacaceae</b>	TAAUA	<i>Talinum aurantiacum angustissimum</i> Engelm./Gray	Yellow flameflower
	TAPU	<i>Talinum pulchellum</i> W & Standl.	Showy flameflower
	POMU2	<i>Portulaca mundula</i> I. Johnst.	Chisma
	POOL	<i>Portulaca oleracea</i> L.	Yellow-flower purslane
<b>Ranunculaceae</b>	CLDR	<i>Clematis drummondii</i> Torr. & Gray	Texas virgins-bower
<b>Rhamnaceae</b>	CEGR	<i>Ceanothus greggii</i> Gray	Desert ceanothus
	COER5	<i>Condalia ericoides</i> (Gray) M. Johnst.	Javelinabush
	COWA	<i>Condalia warnockii</i> M. Johnst.	Warnock condalia
<b>Rosaceae</b>	CEMOP	<i>Cercocarpus montanus</i> var. <i>paucidentatus</i> (S.Wats.) F. L. Martin	Shaggy mountain mahogany
	CEMOG	<i>Cercocarpus montanus</i> var. <i>glaber</i> (S.Wats.) F. L. Martin	Smooth mountain mahogany
	FAPA	<i>Fallugia paradoxa</i> (D.Don) Endl.	Apache plume
<b>Rubiaceae</b>	HOAC	<i>Houstonia acerosa</i> (Gray) Gray ex Benth. & Hook.	Needleleaf bluets
	HOACP	<i>Houstonia acerosa</i> var. <i>polypremoides</i> (Gray) Terrell	Needleleaf bluets
	1 HOPO	<i>Houstonia acerosa</i> var. <i>polypremoides</i> Small	Needleleaf bluets
	THTE2	<i>Thamnosma texana</i> (Gray) Torr.	Cordocillo
<b>Rutaceae</b>	CHDU	<i>Choisya dumosa</i> (Torr.) Gray	Mexican orange
<b>Scrophulariaceae</b>	CALA24	<i>Castilleja lanata</i> Gray	Woolly paintbrush
	CASE5	<i>Castilleja sessiliflora</i> Pursh	Downy paintbrush
	CATO7	<i>Castilleja tortifolia</i> Pennell	Twistleaf paintbrush
	MAAN6	<i>Maurandya antirrhiniflora</i> Humb. & Bonpl. ex Willd.	Snapdragon maurandya
	PAOB	<i>Panicum obtusum</i> H.B.K.	Vine mesquite

\*Acronym provided is not listed in the SCS (1984) publication.

**Table 2. Continued**

Family name	SCS Acronym	Scientific name	Vernacular name
<b>Solanaceae</b>	PHHEC2	<i>Physalis hederifolia</i> var. <i>cordifolia</i> Gray/(Gray) Waterfall	Heartleaf groundcherry
	PHHE4	<i>Phylas hederifolia</i> Gray	Heartleaf groundcherry
	SOLAN	<i>Solanum</i> spp. L.	Nightshade
	SOEL	<i>Solanum eleagnifolium</i> Cav.	Elegant nightshade
	CHSO	<i>Chamaesaracha sordida</i> (Dunal) Gray	Pale false-nightshade
	LYAN	<i>Lycium andersonii</i> L.	Anderson's wolfberry
<b>Ulmaceae</b>	CELA	<i>Celtis laevigata</i> var. <i>reticulata</i> (Torr.) Benson	Sugar hackberry
<b>Verbenaceae</b>	ALWR	<i>Aloysia wrightii</i> (Gray) A.Heller	Oreganillo
<b>Zygophyllaceae</b>	KAHI	<i>Kallstroemia hirsutissima</i> Vail ex Small	Hairy caltrop
	LATR	<i>Larrea tridentata</i> (Sesse & Mocino ex DC.) Coville	Creosote

**Other species observed along arroyos but not on sample locations**

Cyperaceae	JUDE	<i>Juniperus deppeana</i>	Alligator juniper
Poaceae	LEDU	<i>Leptochloa dubia</i>	Green sprangletop
Rosaceae	ROWO	<i>Rosa woodsii</i>	Wood's rose
Verbenaceae	VEWR	<i>Verbena wrightii</i>	Wright's vervain

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**May 1997**

**Las Cruces, NM**  
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