

Chromosome counts on DJF collections of Cactaceae

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Species	Collection No.	Count
<i>Corynopuntia clavata</i>	DJF1138	n = 11
<i>Echinocereus triglochidiatus</i> var. <i>mojavensis</i>	DJF1373	no count*
<u>OPUNTIA</u>		
<u>Series Polyacanthae</u>		
<i>Opuntia polyacantha</i> var. <i>hystericina</i>	DJF1373	no count*
<i>Opuntia polyacantha</i> var. <i>polyacantha</i> [approx. type locality <i>O. rufispina</i>]	DJF0670	n = 22
<u>Series Opuntiae</u>		
<i>Opuntia macrorhiza</i> var. <i>greenii</i>	DJF1296b	no count
<i>Opuntia macrorhiza</i> var. <i>greenii</i>	DJF1367	n = 22
<i>Opuntia macrorhiza</i> var. <i>greenii</i>	DJF1374	n = 22
<i>Opuntia pottsii</i> var. <i>montana</i>	DJF1310	no count
<i>Opuntia pottsii</i> var. <i>montana</i>	DJF1376	n = 22
<u>Series Tortispinae</u>		
<i>Opuntia cymochila</i> [type locality]	DJF0673	n = 33
<i>Opuntia cymochila</i> (“normal” large Rio Grande phenotype)	DJF1137	n = 33*
<i>Opuntia cymochila</i> (long-dk- spined, “tulip-flower” phenotype)	A: DJF1137	n = 33*
<i>Opuntia cymochila</i> (long-dk- spined, “tulip-flower” phenotype)	B: DJF1137	no count*
<i>Opuntia cymochila</i>	DJF1296b	no count

<i>Opuntia cymochila</i>	DJF1375	n = ca. 33
<i>Opuntia tortispina</i>	DJF1137	no count
<i>Opuntia tortispina</i>	DJF1376	n = ca. 33
<u>Series Phaeacanthae</u>		
<i>Opuntia camanchica</i> A	DJF1170	n = 33
<i>Opuntia camanchica</i> B	DJF1170	no count
<i>Opuntia camanchica</i> [type locality]	DJF0672	n = 33
<i>Opuntia dulcis</i> (= <i>O. phaeacantha</i> var. <i>major</i> sensu strictu)	DJF1170	no count
<i>Opuntia phaeacantha</i> var. unnamed (pale spines, large flower)	DJF1138	n = 33
<i>Opuntia phaeacantha</i> var. unnamed (pale spines, large flower)	DJF1170	no count
<i>Opuntia phaeacantha</i> var. <i>phaeacantha</i> A	DJF1137	n = 33
<i>Opuntia phaeacantha</i> var. <i>phaeacantha</i> B	DJF1137	no count
<u>Series Gilvescentes [nom. prov.]</u>		
<i>Opuntia gilvescens</i> A	DJF1170	n = 33
<i>Opuntia gilvescens</i> B	DJF1170	no count
<i>Opuntia sandiana</i> [nom. prov. aff. <i>Camanchica</i>] (yellow spines)	DJF1170	n = 33
<u>Series Dillenianae</u>		
<i>Opuntia cyclodes</i>	DJF1367	no count
<i>Opuntia engelmannii</i> var. <i>engelmannii</i>	DJF1170	n = 33
<i>Opuntia valida</i>	DJF1170	no count

Counts made by Don Pinkava or (*) Bruce Parfitt, 1991

Collection numbers refer to localities, not to individual collections, nor to species.

Dates given are not tied to collection [location] numbers, and relate only to specimens listed here. Flowering dates were somewhat later than average in 1991.

Elevations are approximate (terrain is often not level), based on assorted topographic maps.

Lists of Cactus species present at locations may not be complete.

T.L. [type locality] are determined from original logs, journals, and publications of members of expeditions upon which original specimens were collected and not determined from statements made in subsequent literature by other authors. Unless they say "approx.," they are believed to be within 1/2 mile of original collection site or better (some are known to be exact).

"A" & "B" denote two individual plants (distinct clones) of same taxon from same date and locality.

Collection number data

DJF0670, May 24, 1991, se. side Santa Rosa Lake, Guadalupe Co., NM 4750 ft.
Open Juniper woodland and grassland with *Quercus* & *Prosopis* [approx. T.L. of *Opuntia polyacantha* var. *rufispina*].

Cactus species present *Echinocereus fenderli fenderli*, *E. triglochidiatus triglochidiatus*, *E. viridiflorus viridiflorus*, *Echinomastus intertextus dasyacanthus*, *Escobaria vivipara vivipara*, *Mammillaria meiacantha*, *M. wrightii wrightii*, *Opuntia cyclodes*, *O. cymochila*, *O. dulcis* (= *expansa*), *O. gilvescens*, *O. phaeacantha*, *O. polyacantha polyacantha*, *O. pottsii montana*, *O. tortispina*,

DJF0672 May 24, 1991, s. side I-40, Cuervo, Guadalupe Co., NM 4900ft.

Base of limestone-capped sandstone bluffs, [T.L. of *O. camanchica*].

Cactus species present *Cylindropuntia imbricata arborescens*, *E. viridiflorus viridiflorus*, *Escobaria vivipara vivipara*, *O. camanchica*, *O. phaeacantha*, *O. polyacantha polyacantha*, *O. tortispina*.

DJF0673 May 24, 1991. Hwy. 54 bypass (middle) exit, n. side I-40, Tucumcari, Quay Co., NM 4065 ft.

[T.L. of *O. cymochila*]. Flat sandy short grassland.

Cactus species present *Cylindropuntia davisii*, *Echinocereus reichenbachii perbellus*, *Escobaria vivipara vivipara*, *O. cymochila*, *O. camanchica*, *O. phaeacantha*, *O. tortispina*.

DJF1137 May 21, 1991. Coors Blvd., 3.5 ml. n. of Isleta Pueblo, sw. edge of Albuquerque, Bernalillo Co., NM 4910 ft.

Sandy benches, desert scrub/grassland.

Cactus species present *Corynopuntia clavata*, *Cylindropuntia imbricata arborescens*, *E. fenderli fenderli*, *Escobaria vivipara arizonica*, *M. wrightii wrightii*, *O. cymochila* (three phenotypes), *O. camanchica*, *O. curvoclada* [sp. nom. prov.], *O. gilvescens*, *O. phaeacantha*, *O. polyacantha hystricina*, *O. pottsii riograndensis* [ssp. nom. prov.], *O. sandiana* [sp. nom. prov.], *O. tortispina*. [note: number was listed incorrectly as DJF1060 on collections sent to ASU]

DJF1138 May 23, 1991. 0.5 ml. s. I-40, w. side of Coors Blvd. (between Hanover & Glenrio), w. side Albuquerque, Bernalillo Co., NM. 5100 ft.

Flat sandy desert grassland with scattering of low shrubs.

Cactus species present *Corynopuntia clavata*, *Cylindropuntia imbricata arborescens*, *Cylindropuntia kleiniae*, *E. fenderli fenderli*, *Escobaria vivipara arizonica*, *O. camanchica*, *O.*

cymochila (three phenotypes), *O. gilvescens*, *O. phaeacantha* (two phenotypes), *O. polycantha hystricina*, *O. pottsii montana*, *O. pottsii riograndensis* [ssp. nom. prov.] (and intermediates), *O. sandiana* [nom. prov.], *O. tortispina*.

DJF1170 May 20, 1991. w. base of Sandia Mountains, nr. mouth of Embudo Cyn., Albuquerque, Bernalillo Co., NM. 6100 ft.

Broken terrain with granite boulders in desert grassland at lower edge of dry Madrean scrub. Cactus species present *Cylindropuntia imbricata arborescens*, *Echinocereus coccineus coccineus*, *E. fendleri fendleri*, *Escobaria vivipara arizonica*, *M. meiacantha*, *M. wrightii wrightii*, *O. arizonica*, *O. camanchica*, *O. dulcis*, *O. gilvescens*, *O. engelmannii*, *O. macrocentra macrocentra* (very rare here), *O. orbiculata* (rare here; unusual for area, possessing few white spines), *O. phaeacantha* (2 phenotypes), *O. polyacantha juniperiana & hystricina* (+ intermediates), *O. pottsii montana*, *O. sandiana* [nom. prov.], *O. tortispina*, *O. wootonii* (rare here; short-spined variant), ***O. sp. nov.*, *O. valida*.

DJF1296a May 25, 1991. Wilson Ave. × Florida Ave., e. edge of Borger, Hutchinson Co., TX. 3100 ft.

Sand hills.

Cactus species present *O. cymochila*, *O. fragilis*, *O. machrorhiza greenei*.

DJF1296b May 25, 1991. Hwy. 152. 2 ml. e. Borger, Hutchinson Co., TX. 2980 ft.

Low gravel hills in grassland.

Cactus species present *E. reichenbachii perbellus*, *Escobaria vivipara vivipara*, *O. cymochila*, *O. polyacantha polycantha*, *O. pottsii montana*, *O. tortispina* (rare), *O. phaeacantha*.

DJF1310 May 25, 1991. Cass Johnson Rd. (Access road to Alibates Quarry National Monument), 1 ml. w. Hwy. 136, Potter Co., TX. 3200 ft.

Table land with short grass sod and scattered *Prosopis* in [apparently] deep heavy soil.

Cactus species present *E. reichenbachii perbellus*, *Escobaria vivipara vivipara*, *O. cymochila*, *O. pottsii montana*, *O. phaeacantha*.

DJF1367 May 24, 1991. Hwy. 91, approx. 1 ml. n. Puerto de Luna, Guadalupe Co., NM. 4500 ft. Sand hills interspersed with alluvial gravelly/rocky river deposited hills in valley bounded by sandstone bluffs; with scattered *Juniperus* & *Prosopis*.

Cactus species present *Corynopuntia clavata*, *Cylindropuntia imbricata imbricata*, *Cylindropuntia kleiniae*, *Echinocereus fendleri fendleri*, *E. triglochidiatus triglochidiatus*, *E. viridiflorus viridiflorus*, *Echinocactus horizonthalonius*, *Escobaria vivipara vivipara*, *O. camanchica*, *O. cyclodes*, *O. cymochila*, *O. dulcis* (= *expansa*), *O. macrorhiza greenei*, *O. phaeacantha*, *O. tortispina*.

DJF1373 May 15, 1991. on top of Hogback Mountain, 1.7 ml. w. Water flow substation (line of sight), n. of Water flow, San Juan Co., NM. 5550 ft.

Sandstone & alluvium.

Cactus species present *Escobaria vivipara arizonica*, *Sclerocactus parviflorus*, *E. triglochidiatus mojavensis*, *O. polyacantha hystricina*, *O. phaeacantha*,

DJF1374 May 25, 1991. Bridge at Rita Creek, Hwy. 54, 1.7 ml. sw. Dalhart, Hartley Co., TX. 3900 ft.

Sand hills with Sand Sagebrush.

Cactus species present *O. macrorhiza greenei*.

DJF1375 May 25, 1991. Hwy 87, 13 ml. e. of Hartley, 11 ml. w. of Dumas, Moore Co., TX. 3800 ft.

Flat short grassland sod in Prairiedog Town; heavy soil.

Cactus present *O. cymochila*, *O. polyacantha polyacantha*, *O. tortispina*.

DJF1376 May 24, 1991. Rest area, s. side I-40, 5.4 ml. w. jct. Hwy 84, approx. 22 ml. w. Santa Rosa, Guadalupe Co., NM. 5530 ft.

Sandstone ledges and outwash into arroyo.

Cactus present *Cylindropuntia imbricata arborescens*, *E. fendleri*, *Escobaria vivipara arizonica*, *M. meiacantha*, *M. wrightii wrightii*, *O. camanchica*, *O. phaeacantha*, *O. polyacantha polyacantha*, *O. pottsii montana*, *O. tortispina*.

** *Opuntia* unnamed species novum [or recurring hybrid of constant morphology?]; intermediate in character to *O. valida* and perhaps *O. camanchica*; resembles and perhaps a northern variant of *O. confusa* with dark spines and more elongate cladodes.

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