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| --- | --- | --- | --- |
| **Table 1. Probable plant affinities and ecological preference** | | |  |
| **Taxa** | **Plant affinity** | **Comments on *In situ* occurrence (\* in Chinle floras)** | **Habit** |
| *Alisporites* spp. | **Seed fern, Corystosperm** | *Alisporites* pollen have been recovered from a variety of corystospermous reproductive structures (see Balme, 1995 for references). | Canopy |
|
| *Alisporites opii* | **Seed fern, Corystosperm** | Balme (1995) remarked that the structure and, hence, probably affinity of *Alisporites opii* remains unresolved. It is here tentatively included in Corystosperms. | Canopy |
|
| *Alisporites robustus* | **Seed fern, Corystosperm** | See under *Alisporites* spp. | Canopy |
|
| *Alisporites thomasii* | **Seed fern, Corystosperm** | See under *Alisporites* spp. | Canopy |
|
| *Alisporites toralis* | **Seed fern, Corystosperm or Voltziales** | *Willsiostrobus cordiformis* (Grauvogel-Stamm) Grauvogel-Stamm et Schaarschmidt 1978 | Canopy |
|
| *Chordasporites* spp. | **Seed fern, Corystosperm** | Tentatively included in Corystosperms. No *In situ* occurrences. | Canopy |
| *Falcisporites australis* | **Seed fern, Corystosperm** | *Falcisporites* pollen have been recovered from a variety of corystospermous reproductive structures (see Balme, 1995 for references). | Canopy |
| *Sulcosaccisporites alaticonformis* | **Seed fern** | This form taxon may include aberrant forms of bisaccate pollen. | **?** Canopy |
| *Vitreisporites bjuvensis* | **Seed fern, Caytoniales** | See under *Vitreisporites pallidus.* | Canopy |
| *Vitreisporites pallidus* | **Seed fern, Caytoniales** | *Caytonanthus arberi* (Thomas) Harris 1941, see references in Balme (1995). | Canopy |
| *Vitreisporites* sp. | **Seed fern, Caytoniales** | See under *Vitreisporites pallidus.* | Canopy |
| *Platysaccus triassicus* | **Seed fern or Conifer** |  | Canopy |
| *Platysaccus* spp. | **Seed fern or Conifer** |  | Canopy |
| *Protodiploxypinus americus* | **Seed fern or Conifer** | *\*Pramelreuthia dubielii* Ash and Litwin 1996, placed under Probable Coniferales by Balme (1995). | Canopy |
| *Protodiploxypinus doubingerii* | **Seed fern or Conifer** | No known *In situ* occurrences. | Canopy |
| *Protodiploxypinus fastidioides* | **Seed fern or Conifer** | No known *In situ* occurrences. | Canopy |
| *Protodiploxypinus* sp. | **Seed fern or Conifer** | No known *In situ* occurrences. | Canopy |
| *Araucaricites* sp. | **Conifer, Pinales, Araucariaceae** |  | Canopy |
| *Callialasporites* sp. cf. *C. dampieri* | **Conifer, Pinales, Araucariaceae** |  | Canopy |
| *Camerosporites secatus* | **Conifer, Pinales, Cheirolepidiaceae** | No known *In situ* occurrences, but included in the Cheirolepidiaceae due to morphological similarity to *Classopollis.* | Canopy |
| *Camerosporites verrucosus* | **Conifer, Pinales, Cheirolepidiaceae** | No known *In situ* occurrences, but included in the Cheirolepidiaceae due to morphological similarity to *Classopollis.* | Canopy |
| *Classopollis torosus* | **Conifer, Pinales, Cheirolepidiaceae** | *Hirmeriella muensterii* (Schenk) Jung 1968 | Canopy |
| *Cordaitina minor* | **Conifer** |  | Canopy |
| *Potonieisporites* spp. | **Conifer** |  | Canopy |
| *Duplicisporites granulatus* | **Conifer, Pinales, Cheirolepidiaceae** | No known *In situ* occurrences, but included in the Cheirolepidiaceae due to morphological similarity to *Classopollis.* | Canopy |
| *Patinasporites densus* | **Conifer, Voltziales, Majonicaceae** | *Glyptolepis* Schimper 1872, see discussion in Axsmith and Taylor 1997. | Canopy |
| *Enzonalasporites vigens* | **Conifer, Voltziales, ? Majonicaceae** | Tentatively included in Majonicaceae due to morphological resemblance to *Patinasporites.* | Canopy |
| *Enzonalasporites* spp. | **Conifer, Voltziales, ? Majonicaceae** | Tentatively included in Majonicaceae due to morphological resemblance to *Patinasporites.* | Canopy |
| *Inaperturopollenites* spp. | **Conifer, Araucariaceae** |  | Canopy |
| *Klausipollenites gouldii* | **Conifer, ?Voltziales, ?Voltziaceae** |  | Canopy |
| *Lueckisporites* sp. | **Conifer, Voltziales, Majonicaceae** |  | Canopy |
| *Lunatisporites* sp. | **Conifer, Voltziales, Voltziaceae** |  | Canopy |
| *Minutosaccus crenulatus* | **Conifer** |  | Canopy |
| *Ovalipollis ovalis* | **?Conifer** |  | Canopy |
| *Podosporites* “granulatus” | **Conifer** |  | Canopy |
| *Podocarpidites* spp. | **Conifer, Pinales, Podocarpaceae** |  | Canopy |
| *Pseudoenzonalasporites summus* | **Conifer** |  | Canopy |
| *Samaropollenites speciosus* | **Conifer** | Balme (1995) commented that *in situ*pollen from *Dinophyton spinosum* Ash 1970, originally referred to *Alisporites* by Krassilov and Ash (1988) more closely resemble *Samaropollenites.* | Canopy |
| *Spheripollenites* spp. | **Conifer** |  | Canopy |
| *Triadispora* spp. | **Conifer, Voltziaceae** |  | Canopy |
| *Triadospora verrucata* | **Conifer, Voltziaceae** |  | Canopy |
| *Vallasporites ignacii* | **Conifer, Voltziales, ? Majonicaceae** | Tentatively included in Majonicaceae due to morphological resemblance to *Patinasporites.* | Canopy |
|  |  |  |  |
| *Cycadopites* spp. | **Cycad/Ginkgo/Bennettitales** |  | Canopy |
| *Cycadopites stonei* | **Cycad/Ginkgo/Bennettitales** | Granulate monosulcate pollen grains similar to *Granamonocolpites luisae* Herbst have been found in situ in a Middle Jurassic *Williamsoniella coronata*, which is of Bennettitalean affinity (Zavialova et al. 2009) | Canopy |
| *Ephedripites* spp. | **Gnetopsids, Ephedrales** |  | Understory |
| *Equisetosporites chinleanus* | **Gnetopsids, Ephedrales** | *\*Masculostrobus clathratus* Ash 1972 | Understory |
| *Eucommiidites/Pretricolpipollenites* | **Erdtmanithecales** | The morphologically similar genus *Eucommiidites* has been recovered from | Canopy |
| *Lagenella martini* | **Gnetopsids, Ephedrales** |  | Understory |
| *Monosulcites* sp. cf*. M. minimus* | **Cycad/Ginkgo/Bennettitales/Peltasperms** | *Monosulcites minimus* has been found *in situ* in the bennettittalean *Vardekloeftia sulcata* Harris 1932, by Pedersen et al. 1989. | Canopy |
| *Monosulcites* sp. A | **Cycad/Ginkgo/Bennettitales/Peltasperms** |  | Canopy |
| *Monosulcites* spp. | **Cycad/Ginkgo/Bennettitales/Peltasperms** |  | Canopy |
| *Colpectopollis ellipsoideus* | **Unknown gymnosperm** |  |  |
| *Heliosaccus dimorphus* | **Unknown gymnosperm** |  |  |
| *Quadraesporites anellaeformis* | **Unknown gymnosperm** |  |  |
| *Retisulcites perforatus* | **Unknown gymnosperm** |  |  |
|  |  |  |  |
| *Gordonispora fossulata* | **Bryophyte** |  | Ground cover |
| *Nevesisporites* sp. | **Bryophyte** |  | Ground cover |
| *Retusotriletes* sp. | **Bryophyte** |  | Ground cover |
| *Calamospora* spp. | **Sphenopsids, Equisetales** | Triassic *in situ* occurrence include *Echinostachys cylindrical* Schimper et Mougeot 1844, *E. oblongus* Brongniart 1828, *E. verticillata* Grauvogel-Stamm 1978, *Equisetostachys nathorstii* Halle 1908, *E. suecicus* (Nathorst) Halle 1908, and *Schizoneura harrisii* Ash 1985. (See Balme, 1995 for references) | Ground cover |
| *Aratrisporites* sp. | **Lycopod, Isoetales, Pleuromeiaceae** | (See Balme, 1995) | Ground cover |
| *Limbosporites* sp. | **Lycopod** | No known *In situ* occurrences. | Ground cover |
| *Uvaesporites* sp. | **Lycopod, Selaginellales** | *Uvaesporites* has been found *in situ* in *Selaginellites hallei* Lundblad 1950. See Balme (1995) for references. | Ground cover |
| *Anapiculatisporites* sp. | **Fern or Lycopod** | (See Balme, 1995) | Ground cover |
| *Cyclogranisporites* spp. | **Fern, Osmundaceae** |  | Ground cover |
| *Deltoidopora* spp. | **Fern, Dipteridaceae, Dicksoniaceae, Matoniaceae, Cyathaceae** | This taxon has e.g. been found *in situ* in theTriassic-Jurassic dipterids *Dictyophyllum exile* (Braun) Nathorst 1978, *Thaumatopteris brauniana* Popp 1863, and *Thaumatopteris schenkii* Nathorst 1878.  See Balme (1995) and van Konijnenburg-van Cittert (2002) for additional *in situ* occurrences. | Ground cover/  Understory |
| *Dictyophyllidites mortonii/harrisii* | **Fern, Matoniaceae** | *\*Phlebopteris smithii* (Daugherty) Arnold 1947 emend. Ash et al. 1982 | Ground cover |
| *Gleicheniidites* sp. cf. *G. senonicus* | **Fern, Gleicheniaceae** | No Triassic *in situ* occurrence, but from the Jurassic in *Gleichenites nitida* Harris 1931. | Ground cover |
| *Granulatisporites infirmus* | **Fern, Dipteridaceae** | \**Clathropteris walkeri* Daugherty 1941 | Ground cover |
| *Iraqispora* “granulatus” | **Fern** | No known *In situ* occurrences. | Ground cover |
| *Iraqispora laevigata* | **Fern** | No known *In situ* occurrences. | Ground cover |
| *Iraqispora speciosa* | **Fern** | No known *In situ* occurrences. | Ground cover |
| *Laevigatosporites* spp. | **Fern, Marattiales** | (See Balme, 1995) | Ground cover |
| *Osmundacidites* sp. | **Fern, Osmundaceae** | *\*Todites fragilis* Daugherty emend. Litwin 1985 | Ground cover |
| *Polypodiisporites* spp. | **Fern, Schizaceae, Polypodiaceae** | (See Balme, 1995) | Ground cover |
| *Punctatisporites globosus* | **Fern, Osmundaceae** | (See Balme, 1995) | Ground cover |
| *Punctatisporites* spp. | **Fern, Osmundaceae** | *\*Wingatea plumosa* (Daugherty) Litwin 1985 | Ground cover |
| *Reticulatisporites* spp. | **Fern** | Carboniferous *in situ*occurrences are ferns of uncertain order (Balme, 1995). | Ground cover |
| *Retitriletes* sp. cf. *R. austroclavatidites* | **Fern** | No known *In situ* occurrences. | Ground cover |
| *Thymospora* spp. | **Fern, Marattiales** | (See Balme, 1995) | Ground cover |
| *Verrucosisporites* spp. | **Fern, ? Osmundaceae** | No known *In situ* occurrences. | Ground cover |
| *Froelichsporites traversei* | **Unknown** | No known *In situ* occurrences. |  |
| *Playfordiaspora cancellosa* | **Unknown** | No known *In situ* occurrences. |  |