

Lycopodium dubium, Priority B-1. *Lycopodium dubium* Zoega (LYAN2). stiff clubmoss. CNHP G5TU / SU, Track A
G5T3T5 N3N5. CO SU. ARP-Boulder, WR-Eagle; LYCOPODIACEAE

| Criteria | Rank | Confidence | Rationale | Sources of Information |
|---|------|------------|--|--|
| 1 Distribution within R2 | D | H | Distribution map not obtainable – see Taxonomy and Discussion below. | Weber in herbarium 1997, Wagner e-mail 1997. |
| 2 Distribution outside R2 | D | H | Distribution map not obtainable – see Taxonomy and Discussion below. | Weber in herbarium 1997, Wagner e-mail 1997. |
| 3 Dispersal Capability | D | H | Unknown. No populations studied. | |
| 4 Abundance in R2 | D | H | Unknown abundance – see Taxonomy and Discussion below. | Weber in herbarium 1997, Wagner e-mail 1997. |
| 5 Population Trend in R2 | D | H | Unknown trend – see Taxonomy and Discussion below. | Weber in herbarium 1997, Wagner e-mail 1997. |
| 6 Habitat Trend in R2 | D | H | Unknown trend – see Taxonomy and Discussion below. | Weber in herbarium 1997, Wagner e-mail 1997. |
| 7 Habitat Vulnerability or Modification | B | M | Habitat for <i>L. annotinum</i> is “subalpine spruce forests and under willow thickets” (Weber and Wittmann 2001a). These habitats are moderately resilient to disturbance, since they are fairly rocky. | Weber and Wittmann 2001a, my observations. |
| 8 Life History and Demographics | D | H | See Taxonomy and Discussion below. | Weber in herbarium 1997, Wagner e-mail 1997. |

National Forests in the Rocky Mountain Region where species is KNOWN (K) or LIKELY (L)* to occur:

* Likely is defined as more likely to occur than not occur on the National Forest or Grassland. This generally can be thought of as having a 50% chance or greater of appearing on NFS lands.

| COLORADO NF/NG – UNKNOWN | | | K | L | NEBRASKA NF/NG – UNKNOWN | | | K | L | WYOMING NF/NG – UNKNOWN | | | K | L |
|------------------------------------|--|--|---|---|-------------------------------|--|--|---|---|-------------------------|--|--|---|---|
| Arapaho-Roosevelt NF | | | | | Samuel R. McKelvie NF | | | | | Shoshone NF | | | | |
| White River NF | | | | | Halsey NF | | | | | Bighorn NF | | | | |
| Routt NF | | | | | Nebraska NF | | | | | Black Hills NF | | | | |
| Grand Mesa Uncompahgre Gunnison NF | | | | | Ogallala NG | | | | | Medicine Bow NF | | | | |
| San Juan NF | | | | | SOUTH DAKOTA NF/NG -- UNKNOWN | | | | | Thunder Basin NG | | | | |
| Rio Grande NF | | | | | Black Hills NF | | | | | KANSAS NF/NG | | | | |
| Pike-San Isabel NF | | | | | Buffalo Gap NG | | | | | Cimarron NG | | | | |
| Comanche NG | | | | | Fl. Pierre NG | | | | | | | | | |
| Pawnee NG | | | | | | | | | | | | | | |

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Taxonomy. *Lycopodium dubium* was proposed to be added to the flora of Colorado by W. A. Weber in 1982, as a segregate of *L. annotinum*. In 1997, Dr. Weber received an e-mail from H. Wagner, the fern expert at University of Michigan, saying “The name *Lycopodium dubium* is invalid. The type was presumably destroyed [in W. W. II?], and the original description probably applies to a bryophyte or hepatic, according to Øllgaard. It does look different and is probably, as you suggest, a form of *L. annotinum*.” *Lycopodium dubium* is no longer accepted as a species by Dr. Weber, and the specimens at COLO are filed under *L. annotinum*. All state floras and lists now include *L. dubium* as a synonym for *L. annotinum*.

Discussion. I have not prepared a distribution map, since it is now difficult to ascertain which specimens of *L. annotinum* might have been assigned to *L. dubium*. Since this is not a good taxon, it does not qualify for status as sensitive, threatened, or endangered.

References

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