



## Cylindrospermopsis raciborskii

### Cylindro

#### General

1. Cyanobacterium composed of trichomes that are solitary and straight
2. Persist as akinetes (resting cells) in sediments for extended durations at cold temperatures

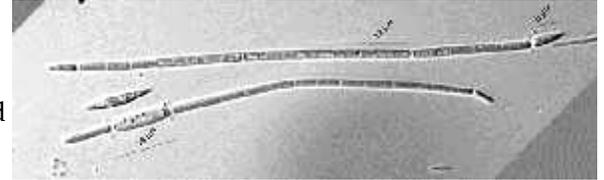


Photo: Rex Lowe  
<http://nas.er.usgs.gov/queries/FactSheet.aspx?SpeciesID=2651>

#### Geography and Habitat

1. Native: Tropical/subtropical in origin. The strain introduced to the Great Lakes may have originated in South America
2. Habitats
  - Germination from akinete stage occurs at 22°C—24°C and in response to elevated phosphorus levels in temperate regions
  - Algae blooms occur in the euphotic zone, not at the surface and appear to be controlled by water temperature, not nutrients
  - Conditions associated with blooms: low flow, low water level, low nitrogen to phosphorus ratio, high water temperature, stable thermal stratification, increased retention time, high pH, high sulfate concentration, anoxia in at least some strata, high turbidity, high incident irradiation, low macrophyte biomass
  - Optimum temperature for growth is 25°C—30°C; tolerant of 15°C—35°C

#### Invasion Pathways

1. Shipping
2. Recreational boating
3. Waterfowl and/or wind dispersal

#### Sources

1. <http://nas.er.usgs.gov/queries/FactSheet.aspx?SpeciesID=2651>