



### Conservation status

The wide presence of *Cladonia cariosa* throughout Italy suggests that it is at risk of local extinction only at low altitudes, where its habitats have disappeared. In contrast, *Cladonia peziziformis* is rare and localized in Italy, and it is found only in dry plain habitats. Protection and conservation of these habitats is thus fundamental to the survival of the species.



*Cladonia peziziformis*



*Cladonia cariosa*

## SO SIMILAR BUT SO DIFFERENT

NAME: *Cladonia cariosa* (Ach.) Spreng.  
*Cladonia peziziformis* (With.) J.R.Laundon

**Habitat:** (mainly) **H6210** - Dry grasslands.

Also found more sporadically in Habitat 4030 – European dry heaths.

**Location:** two species of lichen with very different distribution patterns are found in Italy: *Cladonia cariosa* is widely distributed (although not common) in almost all the regions of Italy, from lowlands to high montane altitudes, on both silicious and calcareous soils. *Cladonia peziziformis*, on the other hand, is very rare, once known of in Liguria but now only found in Piemonte and Lombardia, where it lives exclusively in dry, open habitats in the Po Plain.

**Recognition:** the two species look very similar and younger specimens in particular can easily be confused at first glance. Both are formed by primary thalluses consisting of squamules that grow directly from the soil, and of secondary thalluses consisting of long, thin podetia that grow above the primary thallus and bear one or more round, brown, apical fruit bodies (apothecia). At closer observation, however, the two species can easily be distinguished: ***Cladonia cariosa*** has erect squamules with ragged edges, granular, fissured podetia that can grow as high as 2 cm, and a generally grey colour (glaucous when wet), while ***Cladonia peziziformis*** has

flat, round squamules, and podetia that are smoother and often shorter (less than 1cm). The apothecia are wider and greenish in colour (bright green when wet).

**Facts:** In addition to resembling each other, the two lichens are often found in the same sites, making it important to be able to distinguish and avoid confusing them. Of the two, however, *Cladonia peziziformis* is by far the rarer. In Central Europe both species seem to be far more common in dry heaths (Habitat 4030), while in the Po Plain, they are more commonly found in dry grasslands (Habitat 6210).

**Enemy species:** All species that accelerate vegetation dynamics, causing loss of the microhabitat these lichens need to survive. In particular, woody species and, in Habitat 4030, *Molinia arundinacea*.

**Did you know?:** *Cladonia peziziformis* is very rare in Europe and has been listed as a priority species in the Biodiversity Action Plan in Great Britain. *Cladonia peziziformis* was discovered by Johann Jacob Dillenius, who described it in “Historia Muscorum”, the first book dedicated specifically to mosses and lichens. *Cladonia cariosa* produces a variety of metabolites whose ecological roles are not yet clear.

### Siti di intervento

**ZSC IT 1120010** Lame del Sesia (Greggio e Oldenico, VC), **ZSC IT 2010013** Ansa di Castelnovate (Vizzola Ticino, VA).

> The LIFE Drylands project does not foresee any direct interventions to conserve terricolous lichens, but those aimed at improving Habitat 6210, in particular sod-cutting (raking up and removing the uppermost 10cm of earth) are crucial to the conservation of these lichens. Maintaining their habitat in good condition is the best way to prevent their disappearance.

>>> LIFE DRYLANDS: IT'S TIME FOR DRY HABITATS!

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