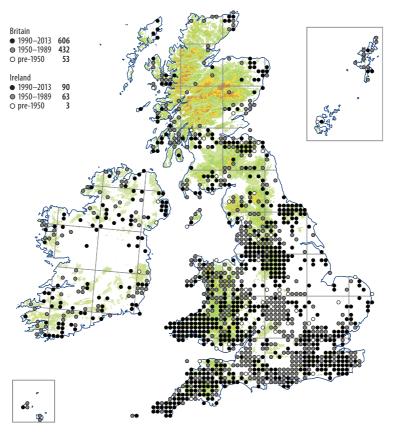
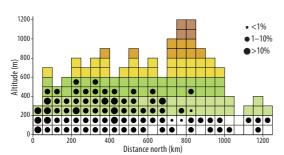
Pseudephemerum nitidum



This is a common early colonist of bare acid soil in damp places on clay, sand, loam or somewhat peaty soil. It occurs in greatest abundance in ephemeral communities on mud on exposed reservoir and lake margins associated with other pioneer species, including Fossombronia wondraczekii, Riccia spp., Aphanorrhegma patens, Ephemerum serratum, Physcomitrium sphaericum and bulbiliferous Pohlia species. Its many other habitats include wet pastures, arable and fallow fields (especially on clay), the margins of streams and pools, and bare ground by paths and rides in woodland. It is reported growing among Puccinellia maritima in saltmarshes by the Solway Firth (Adam, 1976). Though often found in well-illuminated habitats, it tolerates light to moderate shade. Altitudinal range: 0–405 m.



The concentrations of post-1990 records clearly mark out regions that have been systematically recorded during the past two decades. This implies significant under-recording elsewhere, at least in non-calcareous districts.

Synoicous; capsules are abundant, maturing rapidly, mostly in late summer and autumn, but also throughout the year if the ground remains moist; the stem often innovates below the sporophyte to produce two or three capsules one above another, prolonging the fruiting period. Furness & Hall (1981) have recorded a large buried spore bank in lake mud in the Pennines, associated with spores of *Physcomitrium sphaericum*. Spores survive in submerged mud for at least 10 years and probably much longer. Rhizoidal tubers are sometimes present but appear to be very rare. Arts & Risse (1991) found that the production of tubers appears to be genetically fixed, but their abundance is environmentally controlled (in cultivation being most plentiful in nutrient-poor conditions).

European Temperate. Europe north to C Fennoscandia, east to European Russia, south to S Portugal, C Italy and N Greece, but absent in much of the Mediterranean region. Macaronesia, N Africa (Algeria, Morocco). C Asia, Nepal, Japan. Western N America, Mexico, S America. C Africa, Madagascar. Tasmania, New Zealand.

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