

Supplementary materials

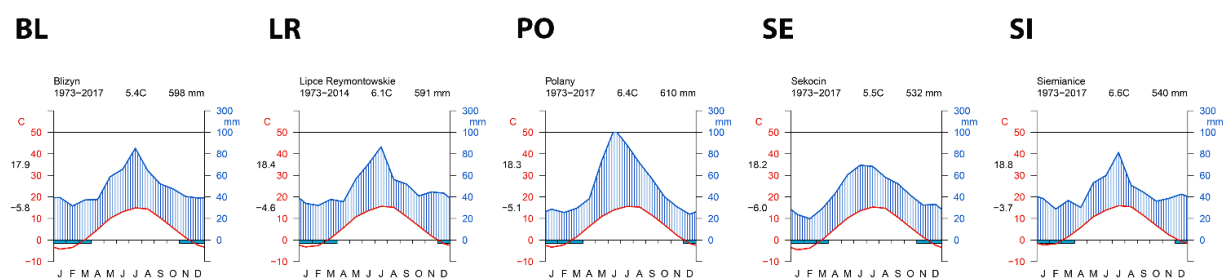


Figure S1. Walter & Lieth climatic diagram of Scots pine provenance trials. BL—Bliżyn site, LR—Lipce Reymontowskie site, PO—Polany site, SE—Sękocin site (study site), SI—Siemianice site.

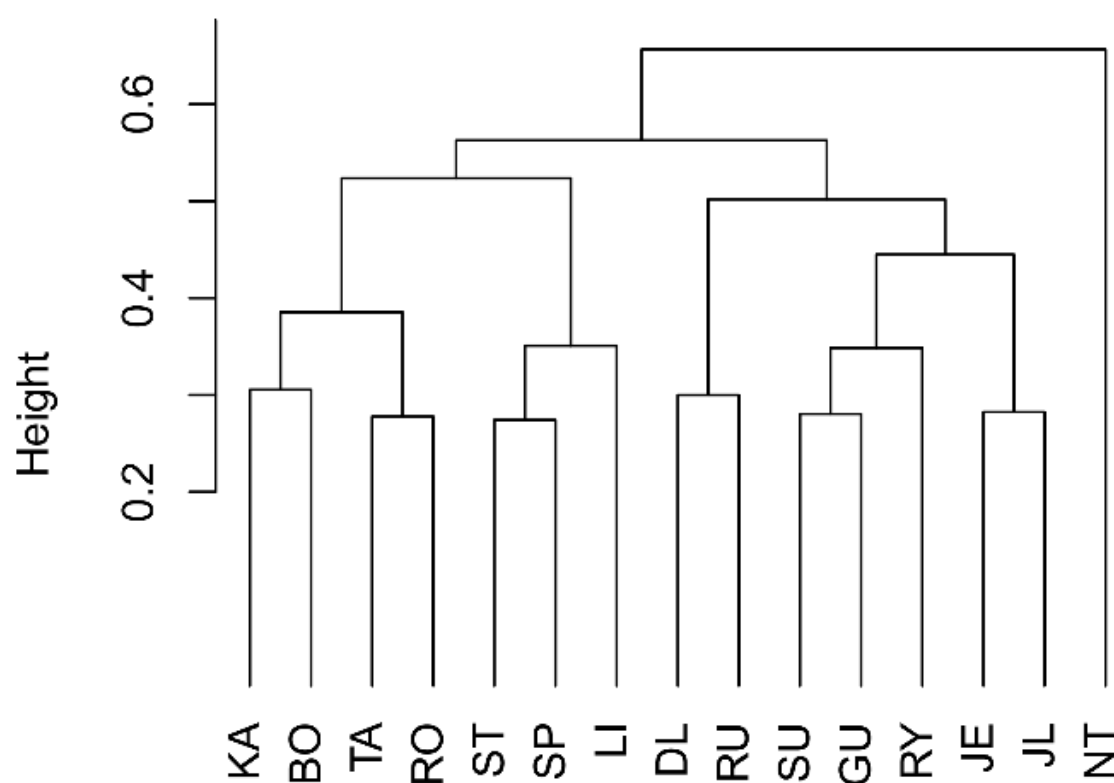


Figure S2. Hierarchical clustering of the RWI provenance mean chronologies, using the Euclidean distance and Ward's minimum variance clustering method. BO, DL, GU, JE, JL, KA, LI, NT, RO, RU, RY, SP, ST, SU and TA Scots pine provenances.

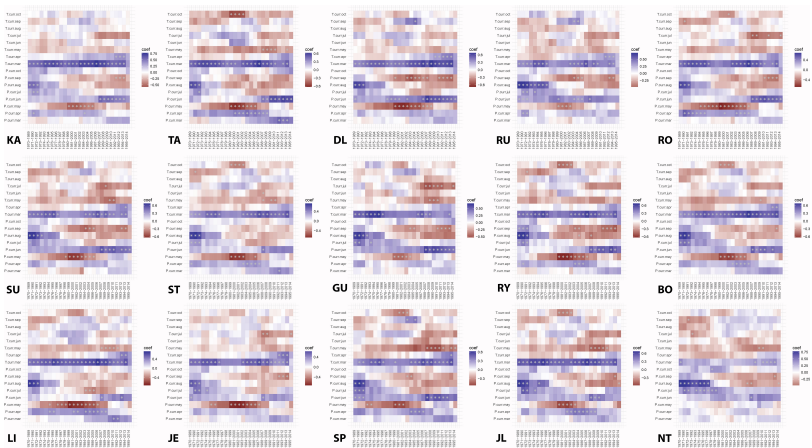


Figure S3. 20-year moving window correlations: between tree -ring width index (TRWI) and March–October precipitation and temperature. BO, DL, GU, JE, JL, KA, LI, NT, RO, RU, RY, SP, ST, SU and TA Scots pine provenances.

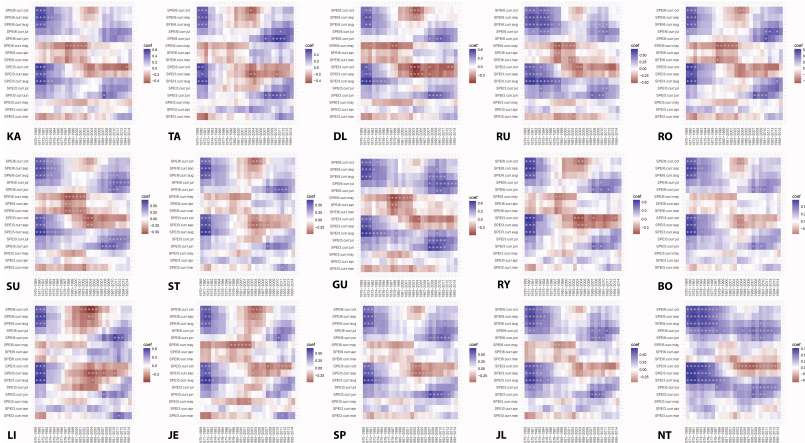


Figure S4. 20-year moving window correlations: between tree-ring width index (TRWI) and March-October SPEI3 and SPEI6. BO, DL, GU, JE, JL, KA, LI, NT, RO, RU, RY, SP, ST, SU and TA Scots pine provenances

Table S1. Occurrence of the most important Scots pine insect needle herbivores (area of affected stands in hectares) in Chojnów Forest District for the period 1970 – 2015.

Year	great web-spinning pine-sawfly <i>Acantholyda posticalis</i> Mats.	sawfy <i>Diprionidae</i>	nun moth <i>Lymantria monacha</i> L.	pine looper moth <i>Bupalus piniarius</i> L.	Pine beauty moth <i>Panolis flammea</i> Den. Et Schiff.
1970	0	0	0	0	0
1971	0	0	0	0	0
1972	0	0	0	0	0
1973	0	0	0	0	0
1974	0	0	0	0	0
1975	0	0	0	0	0
1976	0	0	0	0	0
1977	0	0	0	0	0
1978	0	0	0	0	0
1979	0	0	0	0	0
1980	0	0	0	0	0
1981	0	0	0	0	0
1982	0	0	120.0	0	0
1983	0	0	695.0	0	0
1984	0	0	0	0	0
1985	0	0	0	0	0
1986	0	0	0	0	0
1987	0	0	0	0	0
1988	0	0	0	0	0
1989	0	0	0	0	0
1990	0	0	0	0	0
1991	0	0	0	0	0
1992	0	350.0	0	0	0
1993	0	900.0	34.0	0	0
1994	0	124.0	0	0	0
1995	0.5	18.0	0	2.5	0
1996	2.0	0.5	0	0.5	0
1997	0	0	0	0.1	0
1998	0	0	0	0	0
1999	0	0	0	4.5	0
2000	0	0	0	0	0
2001	0	0	0	0	0
2002	0	0	25.0	0	0
2003	0	0	100.0	0	0

2004	0	500.0	1945.5	230.0	75.0
2005	0	320.0	1575.0	350.0	100.0
2006	250.0	205.0	1896.0	840.0	155.0
2007	0	750.0	1695.0	640.0	125.0
2008	0	1455.0	2295.0	1310.0	245.0
2009	5.0	0	0	300.0	0
2010	5.0	1330.0	0	1105.0	216.0
2011	0	0	0	0	0
2012	0	24.0	0	0	13.0
2013	0	0	0	0	18,0
2014	0	0	0	52.0	7.5
2015	0	0	0	0	0
