



## PINE TORTOISE SCALE

**The threat :** Pine tortoise scale (*Toumeyella parvicornis*) is a Nearctic pest of pine occurring from Mexico, throughout the United States (except the north-west) and into south-central Canada. It was first reported in Italy in 2015 and has spread to Abruzzo, Campania, Lazio and Apulia regions. In 2021 it was found in France Provence-Alpes-Cote d’Azur region. It is contributing to the decline and mortality of stone pine (*Pinus pinea*), particularly in urban areas. In the Caribbean it is a highly invasive pest and in recent decades it has decimated the native Caicos pine forests (*Pinus caribaea* var. *bahamensis*) in the Turks and Caicos Islands. It is not yet known how susceptible Scots pine is to *T. parvicornis* but it was not recorded on *P. pinea* until it was introduced to Italy.

The IPSN is therefore conducting a survey to monitor the spread of Pine tortoise scale in botanic gardens in European countries. We would be most grateful if you could survey the *Pinus spp.* in your collection using this survey form. Please use one form per tree and refer to the accompanying poster for further details and identification help.

Survey Details			
Name of Botanic Garden / Arboretum:			
Country:			
Address:			
Survey carried out by:			
Date of survey:			
Best description of season:			
Tree Details			
Species (cultivar)			
Accession number:			
GPS			
Country/region species is native to:			
Age (years):			
General Description of Health			
Generally healthy	✓	Some damage	✓
Dying	✓	Dead	✓
Any recent changes in health or overall look:			



**IPSN**

International Plant  
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<b>Symptoms Check</b>	<b>Symptom observed?</b> If possible please rate the severity of the symptoms from 1-6; 1= No visible symptoms and 6= severe symptoms
<b>Symptom 1:</b> Pine trees showing shiny appearance, particularly on the bark due to honeydew.	
<b>Symptom 2:</b> Thick black sooty moulds in bark and needles	
<b>Symptom 3:</b> Ground and objects beneath canopy covered in black dust	
<b>Symptom 4:</b> New growth turning/covered in white dust	
<b>Symptom 5:</b> Yellowing/loss of needles and flagging	
<b>Do you think this tree is infested with Pines tortoise scale?</b>	Yes/No