

**TITLE:** THE FUNGUS *DOTHISTROMA PINI* AND THE LICHEN *EVERNIA PRUNASTRI* ON *PINUS BRUTIA* AT "THE VALLEY OF DEATH"

**AUTHORS:** KAILIDIS DS & MARKALAS S

JOURNAL NAME (original): ΔΑΣΙΚΑ ΧΡΟΝΙΚΑ (as translated in English): *FOREST CHRONICLES*

YEAR 1981, 24:(7-8), pp257-259

#### SUMMARY

At the valley Kopatsinu–Langada, Thessaloniki, Greece at an elevation of 500–700m on a poor forest of *Quercus conferta* ( $\equiv$ *Quercus frainetto*) at a heavily browsed and eroded site, seedlings of *Pinus brutia*, deriving from seeds of **unknown origin** (probably north American material), were planted in an area more than 1000Ha. After 25-30 years and till present (stand at the age of 40-45) *Pinus brutia* in the lower part of the valley has started to be heavily infected by *Dothistroma pini*, which caused heavy needle–cast, but at the same time the attacked trees were covered completely from down–up by the lichen *Evernia prunastri*, thus thousands of trees **died**.

The attack is heavier in the lower moist part of the valley and less on the tops. *Pinus nigra*, which apparently grow there better, is attacked by *Dothistroma* less and less is covered by the lichen. The same is true with *Pinus maritima*, but *Pinus radiata* seedlings (1-2 year old) at the local nursery were attacked heavily too. In reforestations of *Pinus brutia* of the same age, on more or less level soils across the main road up to the valley the attack of the fungus and the covering by the lichen is less. Also on *Pinus brutia* at cultivated lands around two restaurants, at an area where the pines are growing even better, the attack of the fungus is even less and no lichens exist.

At the valley, except the pines, the lichens covered the local oaks up to  $\frac{3}{4}$  of them without killing them, but other trees as *Acer campestre*, *Carpinus betulus*, *Cornus mas*, *Fraxinus ornus*, wild pear and poam trees found covered from the lower branches to up completely by the lichens, thus these trees in many places are dying.

#### REFERENCES

- Boyce JS, 1961. Forest Pathology. Mc. Graw – Hill. pp. 1-572.  
Browne FG. Pests and Diseases of Forest Plantation Trees. Oxford, Clarendon Press. pp. 1-1330.  
Franich RA, Wells GL, 1977. *New Zealand J. For Sci* **7(1)**: 35-39.  
Gremmen J, 1968. *Bull. Soc Mycol. France* **84(3)**: 489-492.  
Lanier L, Jolly P, Bondoux P, Bellemeve A, 1976. Mycologie et Pathologie Forestieres, Tom. II. Pathologie Forestiere Masson. p. 1-478.  
Magnani G, 1977. *Cellulosa e Carta* **28(3)**: 37-42.  
Morelet M, 1967. *Bull. Meus. Coc. Linn. De Lyon* **38(8)**: 361-367.  
Murray JS, Batko S, 1962. *Forestry* **35(1)**: 57-65.  
Peace TR, 1962. Pathology of Trees and Shrubs. Oxford, Clarendon Press. pp. 1-753.