

## Incidence of *Cinara thujafilina* on *Platycladus orientalis* (L.) Franco from, Pandharpur District - Solapur (M.S.) India

*Platycladus orientalis* (L.) Franco (Commonly- Morpankhi, Family- Cupressaceae) is an evergreen, monoecious trees or shrubs growing up to 10–60 feet. The shoot is flat and the leaves are scale like. The leaves are arranged in flattened fan shaped growing with resin glands (Farjon 2005).



Aggregation *C. thujafilina*. © S.V. Thite.

They are widely grown as ornamental trees, and are extensively used for hedges. Leaves of *P. orientalis* contain essential oils used to treat fungus infections, cancer, and moles. Hold et al. (2000) described the essential oil derived from the leaves as  $\alpha$ -thujone, which is useful as an insecticide and an antihelminthic agent for the treatment of parasitic worms.

During a routine visit to the campus of K.B.P. Mahavidyalaya, Pandharpur, district Solapur *Platycladus orientalis* found to be infested



*C. thujafilina* (Adult). © S.V. Thite.



Arrow showed development of sooty mould fungus. © S.V. Thite.

with *Cinara* (Cupressobium) *tujafilina* (Del Guercio, 1909). There are total of 35 trees of 14–15 years, which showed aphid infestation.

To find out the spreading of the infestation, a survey of Pandharpur tahsil was conducted in September 2019 to 2020 and the aphid

was found to be associated with the host throughout the tehsils.

*Cinara* is a very large genus that contains more than 200 described species, about 150 of them native to North America, 30 in Europe and the Mediterranean, and 25 in the Far East, and 11 species

are known from India (Ghosh 1982). Aphid belonging to the genus *Cinara* are host specific and anholocyclic, however, an ovipara has now been recorded from Iran (Remaudière & Binazzi 2003). Its original range covered the warm regions of Asia (Blackman & Eastop 1988).

Adult of *C. tujafilina* are reddish-brown with a dorsal pattern of bluish-white wax, and two dark brown divergent curved bands running from head to about the level of the cornicles. The body length of the adult is 1.7–3.5 mm (Blackman & Eastop 2019). During the field study, it was observed that adults feed on the branches and foliage. Adults and nymph suck plant sap from the phloem tissue. Due to sap sucking eventually there is a formation of sooty mold fungus and the ants also get attracted to honeydew. The damage caused by *C. tujafilina* results in foliage discolouration which degrades the ornamental value of the host. Heavy infestation was observed from September to November, which decreased up to January.



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