

## **2nd African Forum On Urban Forests**

Green Horizons: Shaping the Future Resilience of African Cities through Urban Forests

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in partnership with:



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Identification of major invasive insect pests, diseases and weeds challenging urban forestry plantations across Addis Ababa city, Ethiopia

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## Introduction

- Urban forestry is one of the six pillars of the 10-years (2024-2033) Ethiopia's Forest Sector Development Program to improve air quality, shade, reducing energy consumption in buildings, mitigating urban flooding and enhance biodiversity.
- However, prevalence of invasive insect pests, diseases and weeds have been widely establish and spread within plantation sites.
- □ Field surveys conducted repeatedly to identify major invasive insect pests, diseases and weed incidence across urban plantations between September, 2022 to September, 2024.





□ The major identified pests are Icerya purchasi from eight tree species;

- Icerya purchasii on eight valuable tree species
- Cypress aphid affects Cupressus Iustanica;
- termites pose a threat to Eucalyptus camaldunesis and Gravilia robusta;
- olive gall insect pest targets Olea europaea subsp. Africana,
- scale insects are prevalent on various ornamental trees,
- defoliator insect pest impacts the Ficus benjamina ornamental tree,
- Uromycladium acaciae is found on Acacia mearnsii;
- Botryosphaeria canker affects Eucalyptus species,
- severe infestation of an unidentified pathogen on Millettia ferruginea
- Milk thistle, Silybum marianum, is also widespread in urban green spaces.









Severe infestation of Cottony cushion scale on on *Cordia africana* tree



Severe infestation of Cottony cushion scale on Acacia melanoxylon tree



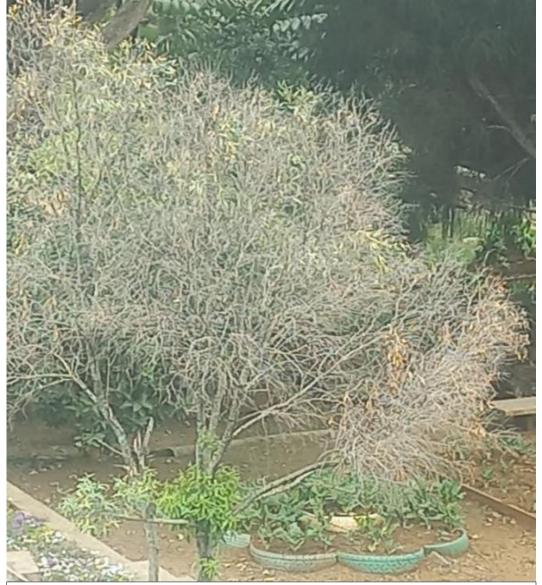






Severe infestation of Cottony cushion scale on Grevillea robusta tree





Olive leaf gall insect pest on Olea europaea subsp. africana



Defoliator insect pest symptom on *Ficus banjamina* tree planted for ornamental purposes







Severe infestation of unidentified insect pest symptom on *Casimiroa edulis* leave



Severe infestation of Cottony cushion scale on Acacia mearensii seedlings





Severe infestation of Wattle rust pathogen on Acacia mearensii tree



Severe infestation of unidentified pathogen on *Millettia ferruginea* tree





Severe infestation of pathogen on Eucalyptus glubulus tree







Figure 2. Leave. flower and seeds of Silvbum marianum (Photos: bv Weldesenbet Beze).



#### **Conclusion and Recommendations**

- □ Recommended Solutions to minimize the impacts of key insect pests and diseases are
  - > Follow the right tree species in the right plantation sites;
  - Avoid improper silvicultural planting practices;
  - Pruning, weeding and removing infested part of trees in plantation sites;
  - > Introducing and releasing biological agents for Cypress aphid controlling, rearing lady birds for Cotton cushion controlling;
  - Using safe plant based chemicals/ oils/ soaps for Scale insects infestations
  - wide and repeated field surveys throughout all Addis Ababa ecosystems to determine the extent of damage of major insect pests and diseases on ecologically and economically important trees by containing and reducing existing infestations.
  - Early detection, identification and Preventive measures typically offer the most cost-effective means to minimize or eliminate environmental and economic impacts.



# Thank You.



