

FOREST PESTS IN SOUTHERN AFRICA: AN EMERGING ALARMING SITUATION

Introduction

The highlights presented in this fact sheet on the current status of forest pests in southern Africa are based on a review of literature and country visits to gather information and expert opinions conducted in 2015. Historically southern Africa has faced many forest insect pest threats such as the Cypress Aphid, Sirex Wood Wasp on pines and recently a number of Eucalyptus pests. The study findings present a very strong case for the South African Development Community (SADC) to activate the SADC Sanitary and Phytosanitary Protocol of 2008.

The worrying status of forest pests in southern Africa

A perplexing observation on forest pests according to the opinion of experts in the SADC region is that since 1986, there has been a five-fold increase in pest movement. This is quite alarming and appears to be linked to the equally rapid spread of *Eucalyptus* as an industrial plantation species that is grown from South Africa all the way to Ethiopia and with regular exchange of germplasm between East and South Africa and even between South Africa and Brazil. By the end of 2015 there were a dozen pests occurring in the southern African region, with Republic of South Africa having the highest diversity of pests. Among them, the two most serious pests of Eucalyptus; the Red Gum Lerp Pysllid (*Glycaspis. brimblecombei*) and the Blue Gum Chalcid (*Leptocybe. invasa*) stand out. They have spread rapidly and in a dramatic fashion to four countries outside South Africa where species of Eucalyptus are widely grown, namely Malawi, Mozambique, Zambia and Zimbabwe. The potential for huge adverse economic impacts appear to be high in Mozambique, South Africa, Zimbabwe and Zambia. In Zambia, reports of severe stunting of trees in plantations was reported and in one plantation in

the Southern Province of Zambia an estimated mortality of 30% and severe stunting was reported. For small scale growers in Malawi, the two pests could wipe out the economic benefits of growing Eucalyptus.

The study findings provide strong support for

the urgent activation of the SADC Sanitary and Phytosanitary Protocol of 2008, in addition to constituting and facilitating a regional technical committee on sanitary and phytosanitary issues and a Specialist Working Group on Forest Pests. This will provide a strong framework for addressing forest and tree pests in the region.



Figure 1. Mortality in a *Pinus patula* compartment in KwaZulu-Natal, South Africa, after heavy attack by the pine wood-wasp *Sirex. noctilio* (Source Hurley et al, 2007)

Priority pests that require urgent regional actions

Pest	Nature of damage and pest distribution
Deodar Weevil <i>Pissodes nemorensis</i>	Feeds on tips, kills shoots, and causes Forking, branching, and tree mortality.
Sirex Woodwasp <i>Sirex noctilio</i>	Attacks pines, causes wilting and tree mortality. South Africa .
Bronze Bug <i>Thaumastocoris peregrinus</i>	Attacks Eucalypts, causes canopy reddening, yellowing and browning, canopy thinning and branch dieback. Mozambique, South Africa, Swaziland Zimbabwe
Blue gum chalcid – a wasp <i>Leptocybe invasa</i>	Galls on leaf mid-ribs, petioles and stems, leaf curling, deformation of stems, stunting and occasional mortality in small trees. South Africa, Mozambique, Zimbabwe
Red gum lerp psyllid – sap sucking insect <i>Glycaspis brimble-combei</i>	Waxy secretions and honey dew, drooping leaves and drying of leading shoots, defoliation and even tree mortality. South Africa, Mozambique, Zimbabwe
Eucalyptus weevil / Snout beetle <i>Gonipterus</i> species	Feeds on foliage and young shoots – causing stunting and mortality in severe cases. South Africa, Swaziland and Zimbabwe
Eucalyptus gall wasp <i>Ophelimus maskelelli</i>	Small green to reddish blister like galls on leaves, premature leaf fall with heavy galling.
Cossid Moth / Quince borer, <i>Coryphodema tristis</i>	Extensive tunneling (sap and heartwood) in the stem bases of standing trees. Saw dust on tree bases. A native pest of South Africa found only on <i>E. nitens</i>



Figure 3. Tunnels made by *Coryphodema tristis* larvae; a native moth that attacks *E. nitens* in South Africa, (left) frass from *C. tristis* tunnelling, frass pushed out the tree (right) . (Source Gebeyu et al, 2005)



Figure 4. White lerp on Eucalyptus leaves, in which the Red Gum Pysllids are contained

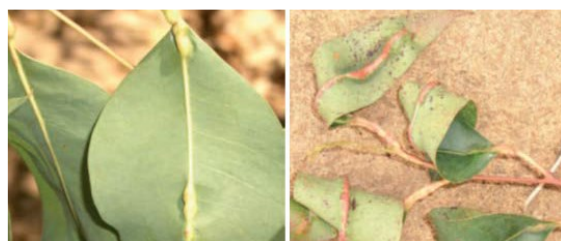


Figure 2. Damage caused by *Leptocybe invasa* on eucalypt branches and leaf petioles (Source: Zimbabwe Forestry Commission)

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