

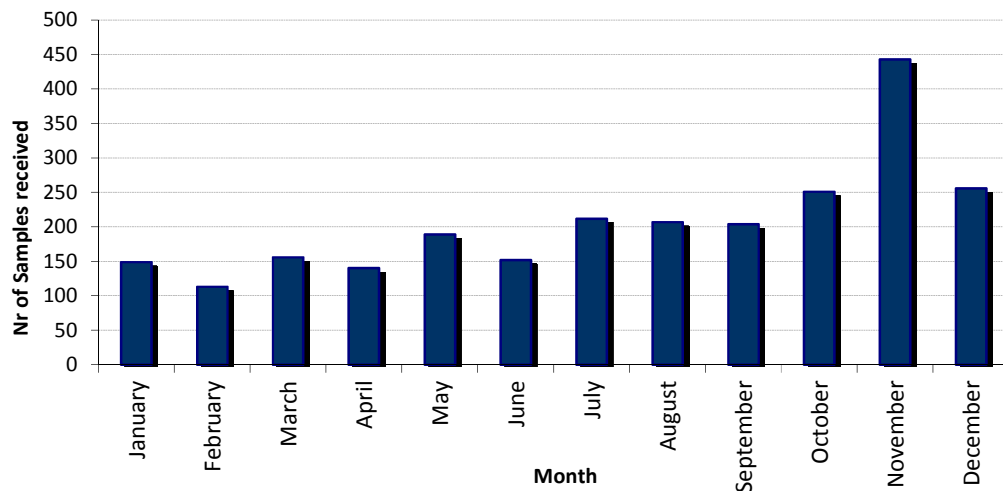
Diagnostic Clinic

TPCP/CTHB Diagnostic Clinic 2010

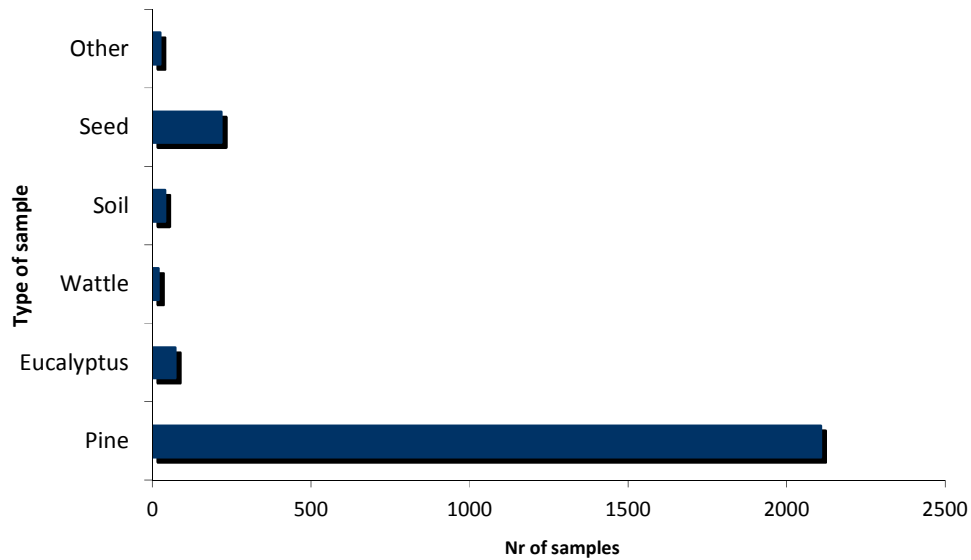
The TPCP/CTHB diagnostic clinic is a service provided to the industry to assist in the identification and management of disease and pest problems of trees. This is a free service, available to all member companies of the TPCP/CTHB Programmes. The clinic also deals with samples that pertain to diseases and pests of native trees. This is consistent with the overlapping interests and activities of the CTHB and TPCP and it provides the group with considerable new strength. With the combined strength the clinic serves as a surveillance tool in monitoring the occurrence and spread of known pests and pathogens as well as in the detection of new pests and pathogens.

The clinic received a total number of 2472 samples from January until the end of December. Pine samples comprised 85 % of the total number of samples received, with the majority of these being for *Fusarium* screening. Of the total samples received, 2.8% were from *Eucalyptus* and 0.7% from *Acacia mearnsii* (Wattle) and 1.5 % were from soil. Seed samples for *Fusarium* screening represented 9% of the total samples. Samples from non-forestry and indigenous trees as well as water samples, categorized as “other”, comprised 1 % of received samples.

Total number of samples received from January - December 2010



Distribution of samples received from January to December 2010



The disease clinic forms only a part of the tree disease diagnostics that the CTHB programme conducts. Many of the consultancies or diagnoses on native trees, are done through site visits, as destructive sampling is not always possible with native trees. Numerous sites were visited in and around Pretoria, as well as in the Cape and Limpopo Provinces, to diagnose diseases of *Celtis africana*, *Acacia* spp., *Euphorbia* spp. and *Adansonia digitata*. Some of these investigations have resulted in the establishment of long-term projects, such as those on baobab and *Euphorbia ingens*. Projects that emerged from these site visits emphasize the close association between the diagnostic clinic, the field services of the CTHB and ongoing research projects in the program.



Juanita, Darryl, Phathie and Jean next a very muddy Nissan – Thank goodness for 4x4!

The clinic is strongly dependant on the help of student team members who process the samples, do analyses and make diagnoses. In return they gain experience and knowledge in working with and identifying different pests and pathogens. The new student members of the clinic are Juanita Engelbrecht, Phathie Sibanda and Xintao Mou. These students joined Darryl Herron and Jean Hakizimana, both who have previously been a part of the diagnostic clinic team. Bernice Porter will continue conducting molecular screening for *F. circinatum*.



Left photo: Sibanda, Juanita Engelbrecht, Izette Greyling, Johan Bekker, Jean Hakizimana and Darryl Herron.

Right photo: Diagnostic Clinic Members with foresters from the Department of Agriculture, Forestry and Fisheries (DAFF) and forestry students.



As part of the training for the new (and not so new) students, clinic members go a fieldtrip to gain more knowledge on the workings of various aspects of the forestry industry as well as pests and diseases in field. We started our trip in Louis Trichardt, travelled to Zululand and ended our trip in the KZN Midlands. On the way we saw a forestry nursery, *Armillaria* root rot, *Phytophthora* root rot of Avocado, *Leptocybe*, *Gonipterus*, *Thaumastocoris*, *Holocryphia* and *Kirramyces zuluense*. We also gained valuable insight into the complexity of tree breeding.