Tree Protection Cooperative Programme (TPCP) comes of age

By Professor Michael Wingfield, director of Fabi and TPCP

This year the Tree Protection Cooperative Programme celebrated its 21st anniversary.

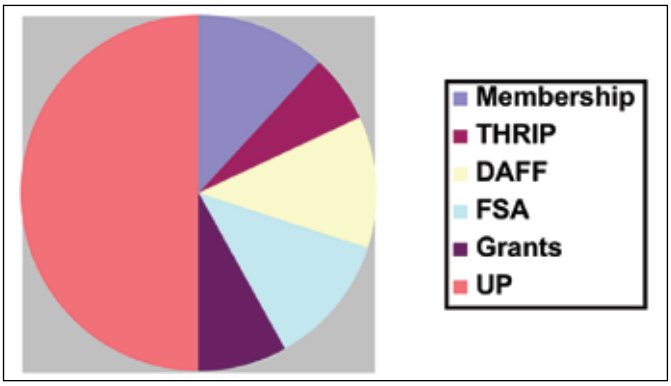
A programme that begun based on a very small team of researchers at the University of the Free State and focused on a single threatening *Eucalyptus* disease problem. The programme has since grown to become highly recognised internationally as the single strongest programme dealing with pest and pathogen problems in plantation forestry in the world. This TPCP has also brought huge energy to agricultural research and education in the biological sciences in South Africa. For example, it formed the foundation for the establishment of the Forestry and Agricultural Biotechnology Institute (FABI; www:fabinet.up.ac.za) at the University of Pretoria, which in just 13 years has become a flagship research centre promoting many aspects of plant improvement in South Africa.

Pests and diseases, at least on a national scale, have no boundaries. Put another way "weeds are shared between neighbours". These huge threats to plantation sustainability typically require team, as opposed to individual effort. The study and management of pest and pathogens affecting

plantation forestry also requires substantial investment and critical mass in terms of human capacity. This was the crux of the idea to establish a cooperative venture, linking industry partners and a university with access to extensive laboratories, research equipment and scientists with a knowledge of pests and pathogens. Moreover, such a cooperative venture would bring postgraduate students with expertise in pathology, entomology, microbiology, biotechnology and many other disciplines within reach of a dynamic forestry industry.

Three South African forestry companies took the initiative to establish the TPCP at the University of the Free State 1989 and

Professor Michael Wingfield, Mike Shaw, Neville Denison and John Tew, the initiators of the TPCP blowing out candles at the 21st anniversary of the research programme



Funding pie chart

the programme was formally launched in 1990. The research directors of these companies Neville Denison (Mondi), Mike Shaw (Sappi) and John Tew (then of HLH) together with visionary Prof Piet Lategan (HOD of Microbiology) were the driving force behind getting the TPCP up and running. It was fitting therefore that they were present for the programme's 21st birthday celebration during the annual TPCP symposium in May this year. Mike Wingfield, the sole researcher in the original TPCP is now supported by a superb group of 10 PhD level pathologists and entomologists that form the core research team. Some 55 MSc and PhD students work on projects linked to tree health although these are shared with the DST/NRF Centre of Excellence in Tree Health Biotechnology, which is mandated to focus on the health of native woody plants.

The TPCP has grown and matured during its first 21 years, changing to meet the needs of the South African forestry industry. Virtually all companies and groups supporting forestry in the country are members of the programme, which provides a foundation in research (short and long term), integrated pest and disease management support, extension and education (undergraduate and post-graduate). Importantly, the TPCP acts as a major catalyst to secure funding for tree health research. In this regard, the TPCP membership and industry funding represents a "nucleus" of funding that synergises access to funds from the University of Pretoria, the National Research Foundation, the Department of Agriculture, Forestry and Fisheries, the THRIP initiative of the Department of Trade and Industry (DTI), Government Bilateral (international) Agreements and others. This results in a situation where a relatively modest base of funding from industry results in a programme that has a value of approximately R20 million annually, that is internationally recognised and that provides the South African forestry industry with a world-class base of support in a crucially important area. MN