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EDITOR'S NOTE

Protecting our plants

This year has been declared the International Year of Plant Health (IYPH) by the United Nations (UN) General Assembly, the idea being to raise awareness on how protecting plant health can help end hunger, reduce poverty, protect the environment, and boost economic development.

IYPH activities are being spear-headed by the UN Food and Agriculture Organisation (FAO) and the secretariat of the International Plant Protection Convention (IPPC) – a global treaty to protect the world's plant resources from the harm caused by pests and diseases. South Africa is one of the 184 contracting parties to the IPPC, and abides by phytosanitary standards designed to prevent the spread of pests and disease-causing pathogens through cross-border trade activities.

Other human activities that have ultimately resulted in altered ecosystems and climate change have also allowed pests and pathogens to thrive in areas where they may have been manageable before. It is estimated that pests and diseases now cause up to 40% of global food crops to be lost annually, which not only threatens food security, but pushes up the price of food. Plants also provide raw materials for our buildings, clothes, medicines and biofuels, so losses in agricultural products due to pests and diseases amount to some US\$220 billion per year. Rural poor communities are the worst affected, because they depend

more on agricultural resources for subsistence and income.

Of course, plants also have considerable environmental and aesthetic value – they produce the oxygen we breathe, promote biodiversity by providing habitat, play an important role in climate regulation, and increase our enjoyment of gardens, parks and streets. Yet over the past two years, city dwellers in South Africa have witnessed the destruction wreaked by a tiny beetle from South East Asia, the polyphagous shothole borer, which has killed thousands of urban trees by tunnelling into the wood and introducing a symbiotic fungus that causes dieback. The pest also poses a potential threat to some commercial crops, such as avocado and pecan.

In this issue of *Quest* we show some ways in which scientific research is helping to protect plants from pests and diseases, manage the risks and mitigate the impacts.

Sue Matthews
QUEST Editor



Lesisqephu se *Quest* sibheka izinambuzane, nezifo ezihlasela izitshalo. Ngokulimaza kwazo izitshalo zehlisa ukutholakala kokudla bese zenyusa intengo yakho. Ukuvikela izitshalo ezinambuzaneni nasezifweni kungasiza futhi kweseke nemizamo yokuqeda indlala, kwehlise inhlupheko, kuvikele imvelo, kwenyuse namandla omnotho.

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