For Immediate Release

To: All Media

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Attention: News Editors / Agricultural writers

The Agricultural Research Council first release of the Tradescantia tip beetle as a biological control agent.

Pretoria: The Agricultural Research Council-Plant Health and Protection will release Tradescantia tip beetle in Iphithi Nature Reserve, Gillitts, Ethekwini, KwaZulu Natal as a biological control agent on 13 March 2019. The release of the Tradescantia tip beetle is to respond to *Tradescantia fluminensis,* commonly known as spiderwort, an invasive plant originally from southern Brazil. The agricultural sector today is facing many challenges that can affect high yields and food security.

The invasion of non-indigenous species is one of the challenges that the agricultural sector is facing. The control of weeds has a huge economic impact of the agricultural sector as huge amounts of money are spent on controlling invasive species. The invasive species can have a negative impact to the farming sector and the health of the community. However the Agricultural Research Council-Plant Health and Protection campus has been working on number of control measures that are environmentally safe.

In 2013 the ARC initiated a biological control programme to assist with controlling the invasion of spiderwort. Spiderwort has become invasive in several parts of the world including Europe, Australia and New Zealand. The plant forms thick mats on the ground, particularly in wooded areas, preventing other herbaceous species from growing and impeding the recruitment of forest trees.

The Tradescantia tip beetle was imported into the ARC-Plant Health and Protection quarantine facility at Cedara in 2014. A breeding population was established in quarantine, and the safety of the beetle was tested for, using standard international procedures. Indigenous plants which are closely related to spiderwort were exposed to the beetle, and its ability to survive on them was recorded. As had been demonstrated in New Zealand, the beetle was only able to survive and form a population on the target weed, and is therefore safe for release in South Africa.

An application for release of the beetle as a biological control agent against spiderwort, in the form of a report, was therefore submitted in 2017 to the Department of Agriculture, Forestry and Fisheries. The report was reviewed by international and local experts, and a permit for release was issued in March 2018. Unfortunately at the time the size of the beetle culture in

quarantine was small at that stage, and it has taken a year for the culture to be increased to a point at which a release can be made.

The ARC will therefore release the beetle at a number of sites with plenty of healthy spiderwort, in different habitats, and monitor it to determine whether it establishes a permanent population that is self-sustaining. If it does so, at some release sites at least, we will assess the effectiveness of the beetle in suppressing growth, density and spread of spiderwort, and the return of native biodiversity.

“The ARC realises the importance of the insects in the ecosystem and how they can contribute to the food security and high yields” said ARC CEO Dr Shadrack Moephuli.

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Notes to the Editors

About the Agricultural Research Council
The Agricultural Research Council is a premier science institution that conducts research with partners, develops human capital and fosters innovation in support of the agricultural sector. The ARC provides diagnostic, laboratory, analytical, agricultural engineering services, post-harvest technology development, agrochemical evaluation, consultation and advisory services, food processing technology services as well as various surveys and training interventions. For more information visit the ARC website at: www.arc.agric.za