



POST-HARVEST INNOVATION PROGRAMME

a public-private partnership between



science
& technology

Department
of Science and Technology
REPUBLIC OF SOUTH AFRICA

fpéf
SOUTH AFRICA
Fresh Produce Exporters' Forum

CALL FOR PROJECT PROPOSALS

NOVEMBER 2018

The Post-Harvest Innovation (PHI) Programme is a public-private partnership between the Department of Science and Technology and the Fresh Produce Exporters' Forum (FPEF) to support R&D and Innovation (RDI) aimed at enhancing the global competitiveness of South African fresh horticultural industry.

PHI partners with various industry associations to identify and co-fund research projects that address specific postharvest challenges of their respective commodities. These contributing partners are Cape Flora SA; Citrus Research International; Hortgro Science; Pomegranate Producers Association of South Africa (POMASA); Subtropical Growers' Association; Tomato Producers' Organisation, South African Berry Producers' Association and the Almond Board of South Africa.

The PHI Programme focuses on postharvest RDI in high-priority areas. In addition to providing a platform for RDI, it aims to build critical mass and institutional capacity to support innovation in the fresh horticultural industry.

The FPEF invites interested parties to submit funding applications for research directed at addressing at least one of the Technology Challenges depicted in Table 1 below. These are the main technology challenges currently faced by the fresh horticultural industry and which threaten its global competitiveness.

The Programme recognises that RDI is not limited to conventional scientific disciplines associated with these priority technology areas. Agricultural Engineering researchers are therefore also encouraged to submit proposals that address RDI specifically related to postharvest challenges in the above-mentioned priority areas. Please refer to the Funding Guidelines before completing the application form.

The **Funding Application Form** and the **Funding Guidelines** can be downloaded from <http://postharvestinnovation.org.za/call-for-proposals/>

The closing date for applications is **30 November 2018**.

Table 1: List of industry-specific priority Technology Areas

Industry Association	Priority Technology Areas/Projects
Citrus Research International (citrus)	<ul style="list-style-type: none"> • Improving postharvest disease and pest control in citrus • Reducing chilling injury and other postharvest rind condition problems in citrus • Reducing cold treatment failures and rejections caused by poor air circulation, pallet and carton construction, and fungal degradation of pallets
HORTGRO Science (pome and stone fruit)	<ul style="list-style-type: none"> • Harvest maturity, cold storage and cold chain management to the retailer • Fruit quality management in the handling chain for the prevention of physiological defects • Develop of environmentally friendly technologies for the management of fungal decay • Develop environmentally friendly packaging technologies • Overcome phytosanitary hurdles/requirements of importing countries through the use of various technologies • Upscale and customise ethyl formate fumigation from shipping container to cold room capacity for the control of key phytosanitary pests
Subtropical Growers' Association (avocado, mango, litchi)	<ul style="list-style-type: none"> • Controlled and modified atmosphere packaging • Storage and export protocols for new cultivars • Alternatives to current postharvest treatments • Indicators of maturity and ripening • The effects of physiological and/or pathological disorders on maturity and ripening
Tomato Producers' Organisation (tomatoes)	<ul style="list-style-type: none"> • Reduction of wastage during post-harvest processes • Improvement of shelf life and fruit quality • Soft handling of fruit during the supply chain • Supply chain traceability • Alternatives to plastic packaging • Post-harvest sanitation • Influence of climatic factors on tomato picking times and post-harvest shelf life
Pomegranate Producer Association of South Africa (pomegranates)	<ul style="list-style-type: none"> • Store-ability of pomegranates at lower temperatures, with a view to including a "Cold-steri light" into our FCM protocol. (Extension of the Experico trial) • FCM mortality rates in pomegranates when stored at the above lower temperatures, including the effect of CO2 in the process • The development of a Phytosanitary Information Package for pomegranates, to enable further market access applications • The effectiveness of overhead netting to combat sunburn and wind damage, and its effect on fertility
Cape Flora SA (indigenous fynbos and proteas)	<ul style="list-style-type: none"> • Reducing chilling injury in Proteaceae cut flowers stems through pre- and postharvest management strategies • Control of leaf blackening in Protea as a postharvest disorder • Increasing market access through the use of CATTs technology for control of phytosanitary pests
South African Berry Producers' Association (Blue Berries)	<p>Ensuring that phytosanitary pests <i>Bactrocera Dorsalis</i> and <i>Mediterranean fruit fly</i> are properly eradicated during cold-steri and that blueberry quality remains intact</p>
Almond Board of South Africa (ALBSA) (Almonds)	<p>Trialling and Optimizing EMC (Equilibrium Moisture Control) to obtain curing / dehydration / drying of almonds in-hull, in-shell and shelled to acceptable moisture content percentages and associated food safety requirements</p>