

TR4 as a driver of agroecological approaches in banana production

Jeff Daniells and
Stewart Lindsay



Horticulture
Innovation
Australia



Complexity



**“Of course we can make fast decisions ...
once we have considered the 4872 factors.”**



DRIVERS OF CHANGE

Cyclones have long lasting impact







Worth Protecting





DEADLY DISEASE: The future of the Far North's \$570 million banana industry looks grim after the suspected discovery of a "worst nightmare" fungal disease, known as Panama, on a Tully farm.

Cassowary Coast

Fears rare strain of fungal disease could wipe out Far North's \$570 million banana industry

Kimberley Vasic, The Cairns Post
March 5, 2015 6:30am




TR4 in Tully

TR4 in Tully

A close-up photograph of a person's hands holding a rectangular sign made of brown cardboard. The sign is held high above the person's head. The sign has the words "THE WHOLE WORLD IS WATCHING" written in purple marker in all caps. The person holding the sign has dark hair tied back with a yellow hair tie. The background is a dense crowd of people, some wearing colorful hats, suggesting a public gathering or protest.

THE WHOLE
WORLD IS WATCHING

A group of penguins is gathered on a large, white ice floe. One penguin is captured mid-air, having just jumped from the edge of the ice into the clear blue water below. The background shows a vast, open ocean under a bright sky. The text is overlaid on the right side of the image.

The first step in getting anywhere is
deciding you're no longer willing
to stay where you are!

Plan A

VISITORS

**PLEASE RESPECT
FARM BIOSECURITY**

Please phone or visit the house before entering

Do not enter property without prior approval
Keep to roadways and laneways



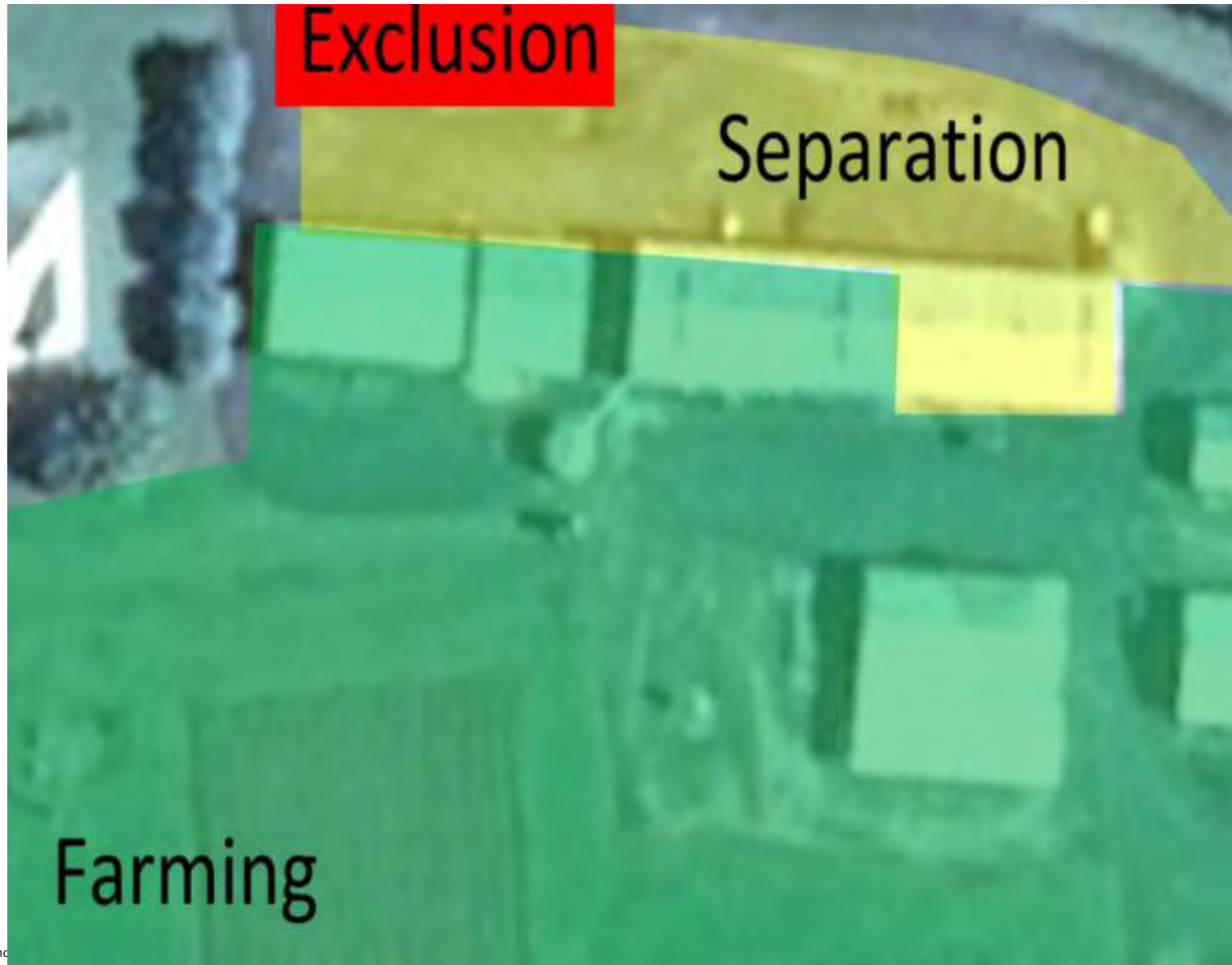
EXOTIC PLANT PEST HOTLINE
1800 084 881

M
Y

KEEP OUT!



Differential Access Zoning



VISITORS
PLEASE RESPECT SERRA FARMS
FARM BIOSECURITY
Please call 4085 4344 or 0429 800 220 or visit the farm office prior to entering
**DO NOT ENTER PROPERTY
WITHOUT PRIOR APPROVAL
KEEP TO ROADWAYS OR LANEWAYS**

©



NO ENTRY
BEYOND THIS POINT
WITHOUT APPOINTMENT
NO EXCEPTIONS!
CALL: 4095 4344
ALL VISITORS ARE REQUESTED TO WEAR
AND MAINTAIN SHOES THAT ARE FREE
TO BE CLEAN AND FREE OF ALL FOLIAGE
OR OTHER TRAVELLING PLASTIC DEBRIS.

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VEHICLES

STOP
HERE

Wash footwear with
water
Forward grid wash
spray starts
Slowly through
and sanitiser
line at 80m per
hour ahead

FOOT
WASH

STOP
HERE

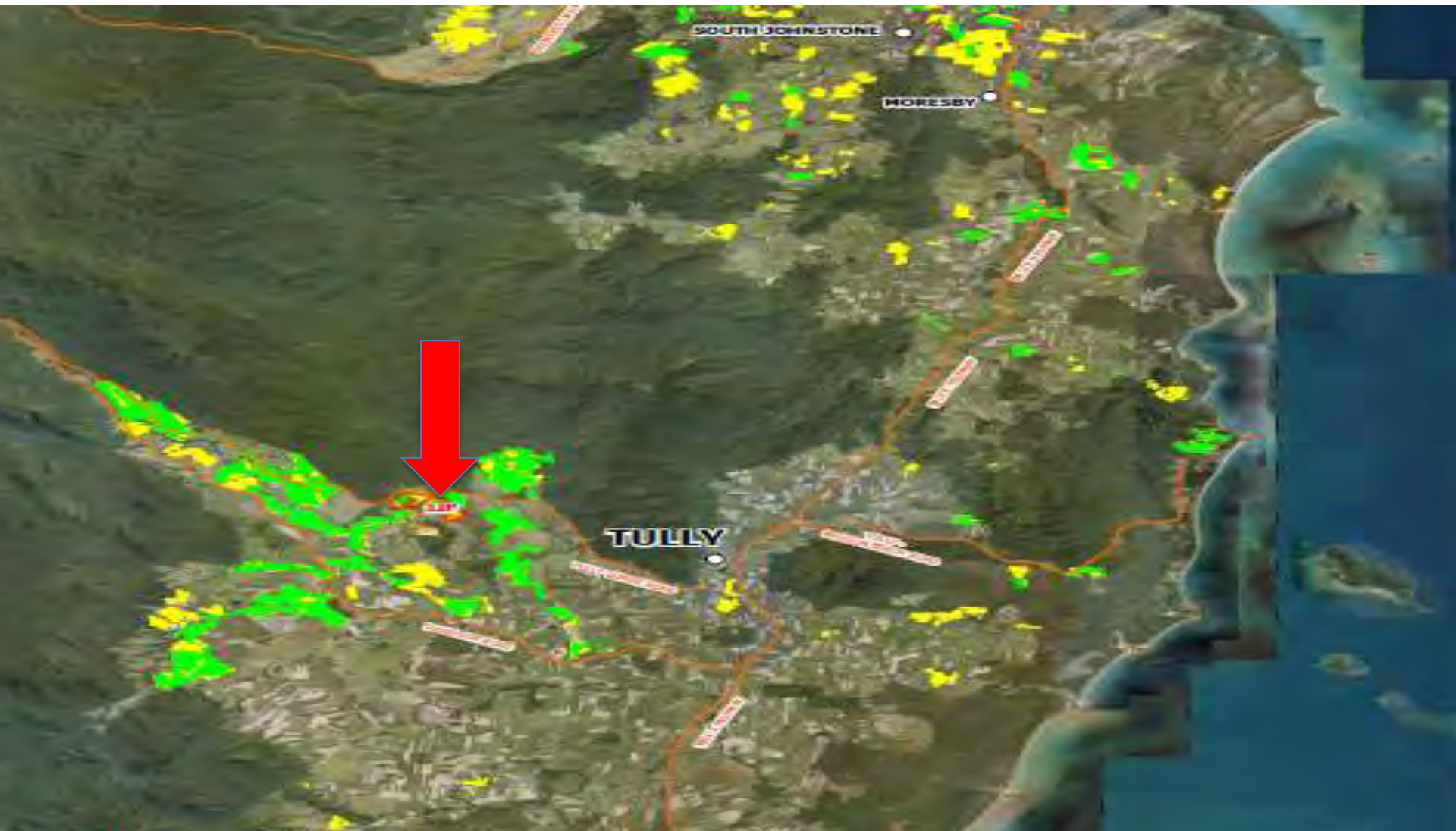
WAIT FOR SPRAY
TO REACH
TYRE HEIGHT
BEFORE
PROCEEDING



Water pays little respect to property boundaries



Tully, north Queensland



Ground Covers For Minimizing Soil Erosion



**Only certified TC
can be guaranteed
free of disease**



Plan B – Integrated Production Systems

Nutrition (Ca/N/pH)



Drainage



Minimising soil compaction

Genetics



Ground covers/fallows



What Assistance is Resistance?



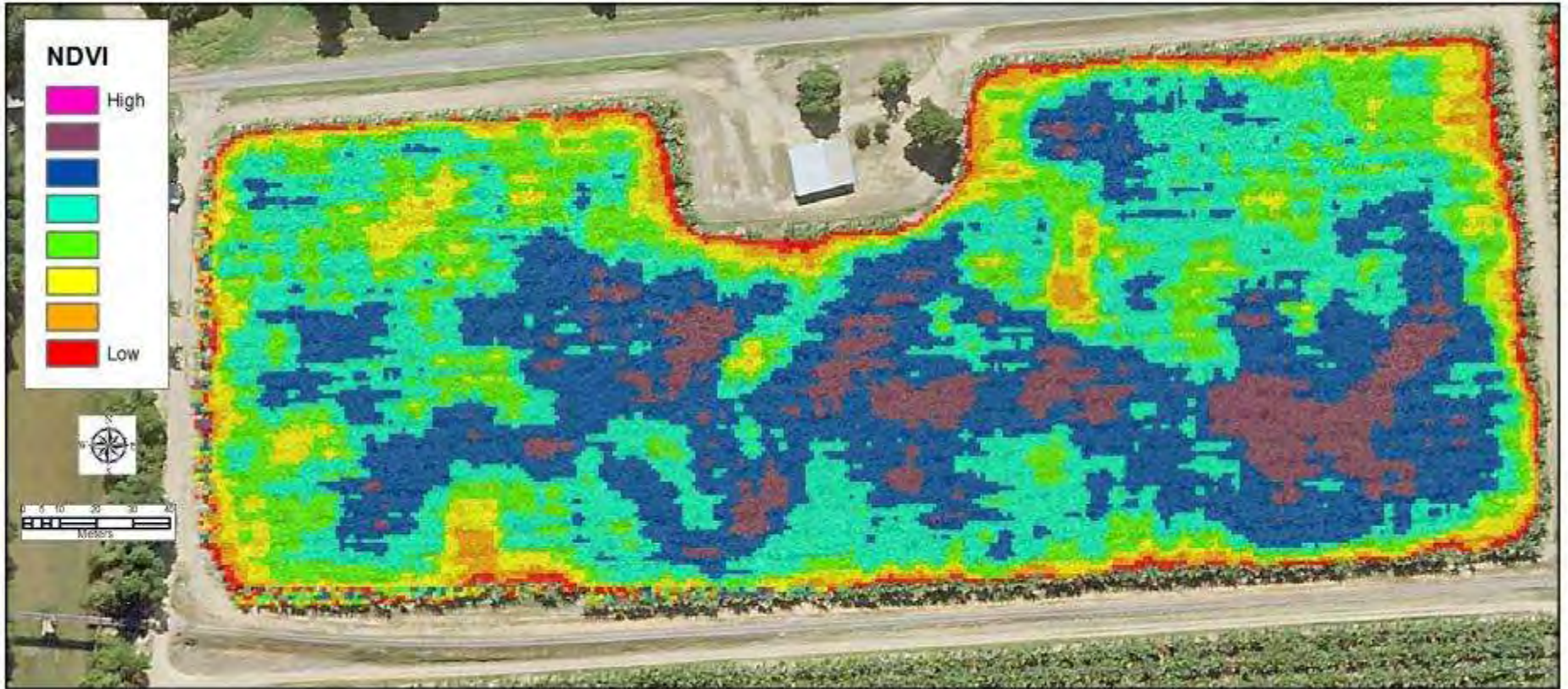
Formosana



FHIA-25

Department of Agriculture and Fisheries

Remote Sensing



Developing New Frontiers



**“A pessimist sees the
difficulty in every
opportunity;**

**an optimist sees the
opportunity in every
difficulty.”**

~ Winston Churchill

