



# Te Kinnongo & Te Kaintamwarake

## PIAT Lesson with ants and ladder game



# What are we going to learn today?

- 1) The top five invasive ant pests.
- 2) The problems they cause to our people, our agriculture and our natural environment.
- 3) Where these ants come from and how they arrive in our country.
- 4) What can you do to stop them.



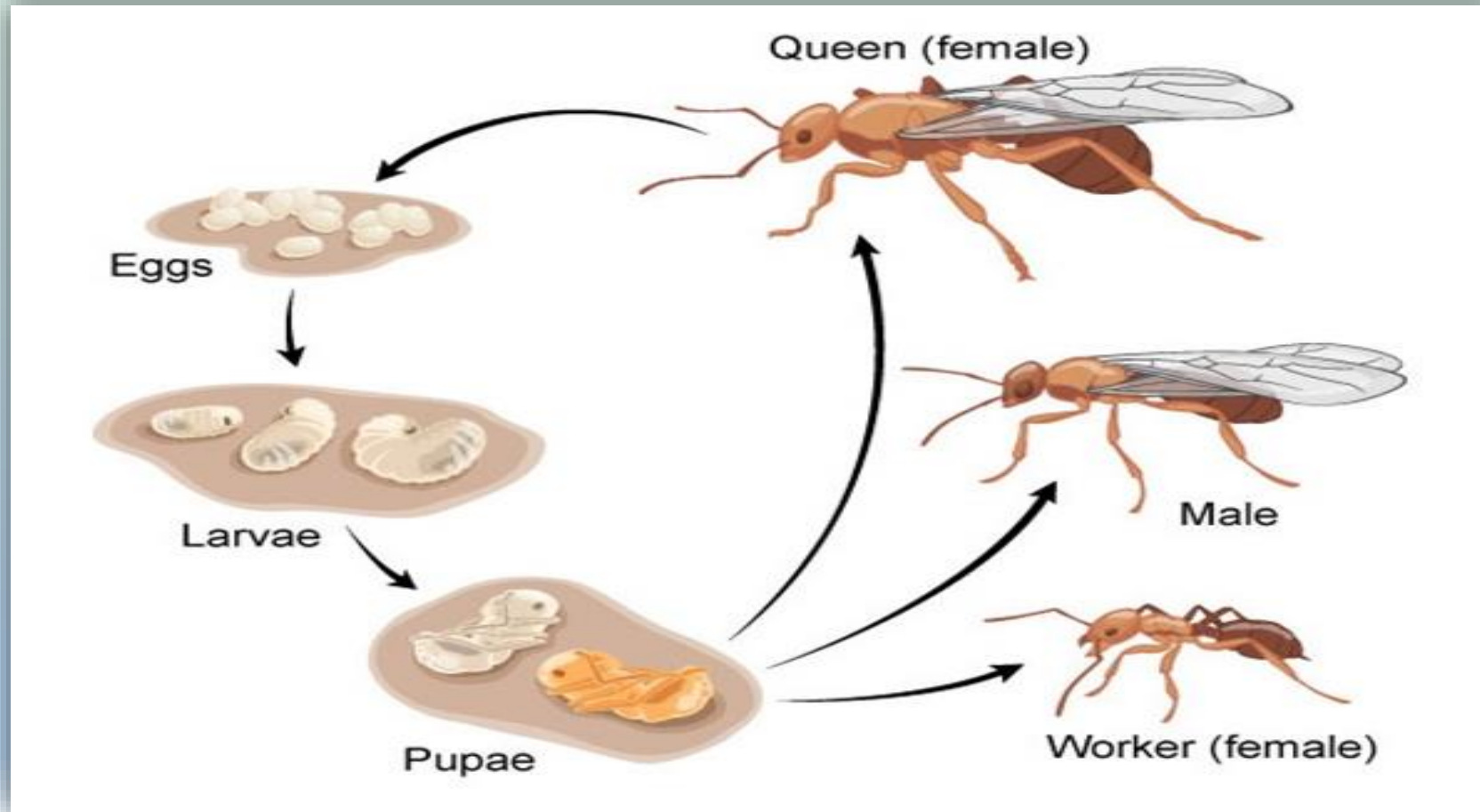
# Ants? What are they?

- Ants are living things. They need air, food and water.
- Ants are insects.
- They have 3 body parts and 6 legs.
- They are in the same family as wasps and bees.
- The queen ant can lay thousands of eggs a day.



# Ant life cycle

Ants go through a number of different stages from egg to adult. They have a 4 stage life-cycle just like the butterfly!



One or more queens lay eggs that develop into new workers, queens and males.

# What is an invasive ant?



An ant that is introduced outside its home range and that damages the natural environment of its new home.

The picture shows red imported fire ants travelling over floodwaters on an uprooted tree.

# The five **WORST** invasive **ANTS** in the Pacific



African big-headed ant



Argentine ant



Red imported fire ant



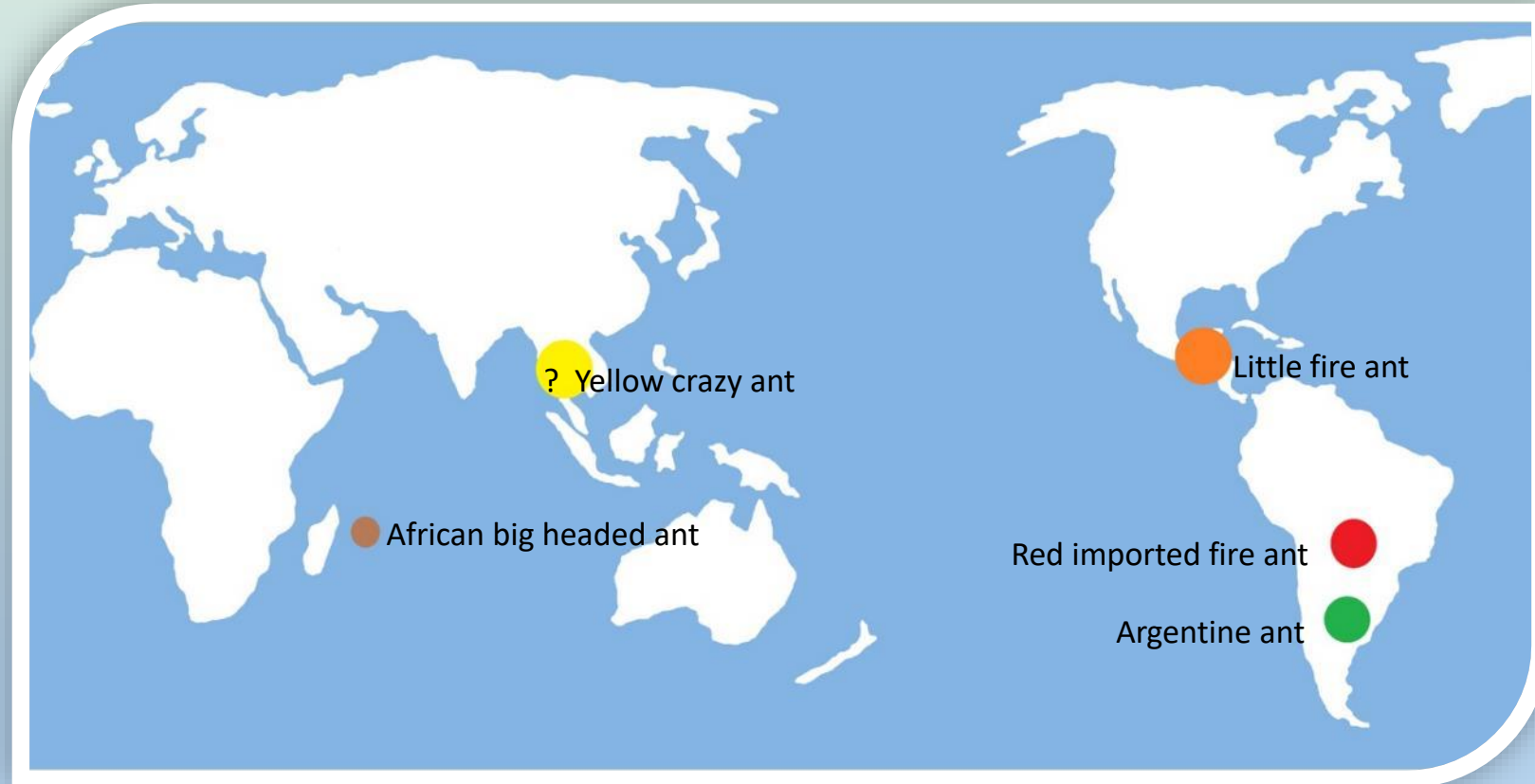
Yellow crazy ant



Little fire ant

You can't tell just by looking at these five ant species that they cause worse problems than any other ants

# Where did the ants come from?



# Where might we find invasive ants?

How they come into the country:

- Ports
- On ships
- Airports
- Unloading areas
- Storage areas





**Biosecurity!**

# How do we find ants when they arrive?



Biosecurity officers check incoming goods at airports and ports to detect invasive ants



Make communities aware of the problems ants can cause. Community members can be on the lookout for invasive ants



Lures (sugar, peanut butter) placed in ports attract ants

# Why are some ants bad?



Clockwise from left: A little fire ant biting; skin rash caused by yellow crazy ants; Sea bird chick covered by African big-headed ants; a child stung on the cheek by a fire ant; ants 'farm' scale insects, which damage crops.

# Are all ants invasive?

**No!**

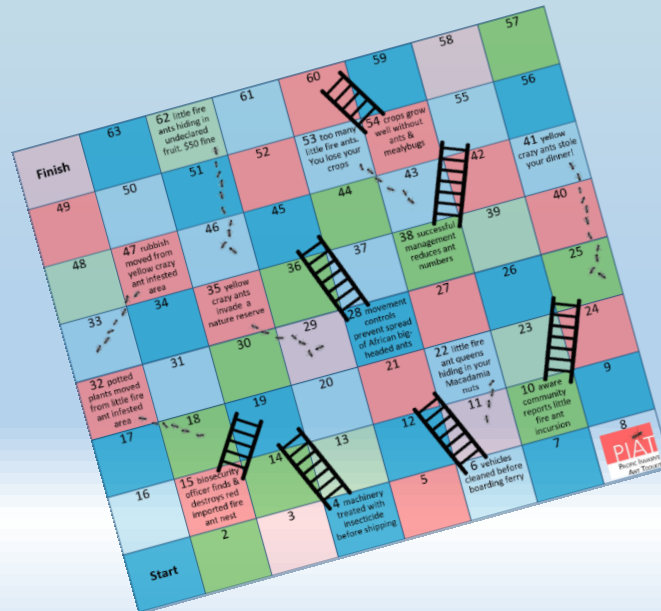
- Only some introduced ants cause problems.
- Some ants are only bad in great numbers.
- Most ants do good things for the environment. They cycle nutrients in soil and eat the larvae of household pests like flies and cockroaches.



The ant in the picture is called a trap jaw ant. It has been introduced into the Pacific but does not cause problems (although it can bite!)

# Activity Time!

We are going to play Ants and Ladders!  
Te Kinnongo & Te Kaintamwarake



# Te Kinnongo & Te Kaintamwarake

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54 A riai n itiaki raoi bwaai ni mwakuri imwain mwamwanaga bwa a kona n reke bwa aia tabo ni kaabung kinnongo

53 A kona ni mate aroka man ana urubwai te kinnongo

47 A tatangira te bwariko n maange kinnongo ibukin aia tabo ni kaabung. Man kamwaingakin bwariko ni maange aikai ao a na kona ni manga rotii riki taabo tabeua

41 Kinnongo babobo a kona n ninia am auti ao ni kataia n ana kanam

35 Te buakonimaiu n ai aron nneia manikiba, beru, ao mwanai a kona naba n rotaki marurungia ao maiuia iroun te kinnongo

38 A bati aanga aika a kona n kauarerekea mwaitin kinnongo bwa ana aki kona n rota marurungia aomata, ununiki ao te buakonimaeu

32 Nnen aroka e bon riki ba kawain te kinnongo ao e kawaekoa butinakona.

28 Te moan totoko ibukin rokon te kinnongo bon taben te Botaki ni Ununiki. Waekoa n ribotini kinnongo aika raka.

22 Kinnongo a katei ngaويا n tenaan ben ake a boka ao iaontano, bwa a aonga ni baitii mwaingingia

15 Tianakin te mwainging, e totokoi ana urubwai te kinnongo. E kakawaki ba ena bon riai n tuoaki bwaai ake a na uotaki man te tabo teuana nakon teuana

10 Te waaki n kaongora e buoka katokan te kanganga iaon ana urubwai te kinnongo. Riibotini ana urubwai te kinnongo nakoia kain te Ununiki (Biosecurity).

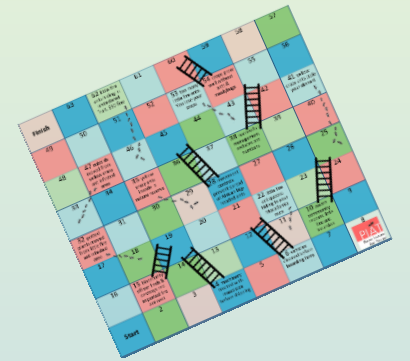
6 E kakawaki bwa kaibuke a riai n tuoaki ao n itiaki bwa a na akea ngaon te kinnongo

4 Te kinnongo ma te bekabeka a roota rikiraken te aroka. E maiuraoi riki te aroka ngkana akea maan aikai

	63	62 Kinnongo uraura a karabaia inanon uaanikai aika aki tuoaki	61	60	59	58	57
<b>Bane</b>	49	51	52	53 E bati te kinnongo uraura. A mate arokam	54 A itiaki bwaai ni mwakuri	55	56
	48	47 Kamwaingan maange man ngaon kinnongo	46	45	44	43	42
	33	34	35 Kinnongo babobo a rinnako inanon te okai	36	37	38 Te tararua ae nakoraoi e kona n kauarerekea mwaitin te kinnongo	39
	32 Nnen te aroka	31	30	29	28 Aobitia a kunei ao ni urui ngaon te kinnongo	27	26
	17	18	19	20	21	22 Te uea n aine n kinnongo e kakaraba n te naan ben ake a boka	23
	16	15	14	13	12	11	10 Aomata a na ribootina ana urubwai te Kinnongo uraura
	2	3	4 Aroka a maiuraoi n akean te kinnongo ao tebekabeka	5	6 Bao ni mwamwananga a riai n itiaki raoi imwain tokarakiia	7	8
<b>E nako →</b>							



# Rules



- Each player puts their counter on the space that says 'Start'.
- Take it in turns to roll the dice. Move your counter forward the number of spaces shown on the dice.
- If your counter lands at the bottom of a ladder, you can move up to the top of the ladder after you have read the information to your friends.
- If your counter lands on an ant trail, you must slide down to the bottom of the trail after you have read the information to your friends.
- The first player to get to the space that says 'Finish' is the winner.



# Te Kinnongo & Te Kaintamwarake

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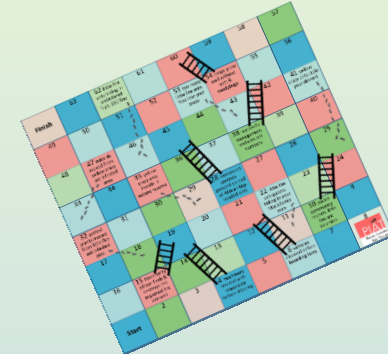
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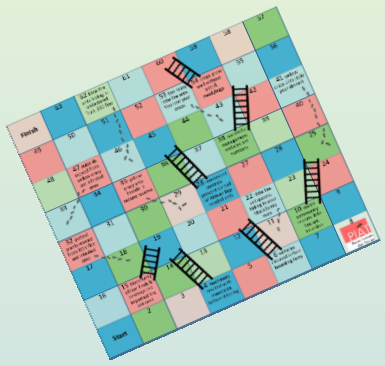
# Ladders – positive actions (Kiribati)



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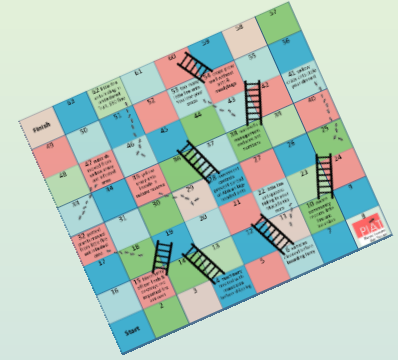


# Ants – negative actions (Kiribati)

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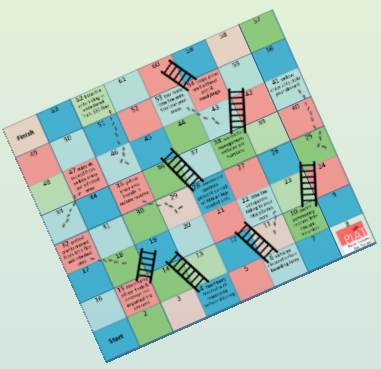


# Ladders – positive actions (English)



- 54 Items of machinery have lots of small spaces that ants can nest in. Machinery should be treated with insecticides, or at least cleaned well before being moved between islands.
- 38 There are ways to reduce numbers of ants so that they don't have effects on people, agriculture and wildlife.
- 28 Biosecurity officers are the first line of protection against invasive ants. Help them do their job by reporting any ants that you think are a problem.
- 22 Little fire ants are so small that a whole colony can nest in a Macadamia nut. Other ants, such as yellow crazy ants, love nesting in rotting coconuts.
- 15 Movement controls are the first step in preventing invasive ants spreading. It is very important to pay attention to these controls and not move risk items (plants, rubbish, machinery), without first having them approved.
- 10 A little awareness can help stop ant problems. Report any ants that you think are a problem to biosecurity officers.
- 6 Vehicles have lots of small spaces that ants can nest in. They should be checked and cleaned before being moved between islands.
- 4 Ants 'farm' plant pests such as mealybugs and scale insects, which can reduce plant growth. Plants grow better without these pests.





# Ants – negative actions (English)

- 62 When travelling it is important to declare high risk items. Not declaring biosecurity risk items (such as fresh fruit) can result in a fine in many nations in the Pacific.
- 53 Little fire ants have a nasty sting which makes it difficult to harvest crops. Some people in French Polynesia have even abandoned their land because of little fire ants.
- 47 Ants love nesting in rubbish piles (and piles of decaying coconuts and plants). Moving these items provides a way of ants invading new places.
- 41 In Tokelau yellow crazy ants invaded homes and even tried to take food off people's plates before they had a chance to eat.
- 35 Wildlife such as lizards, land birds and sea birds and crabs are at great risk from ants. They ants can kill the animals directly or make them leave the area.
- 32 A very important 'pathway' for little fire ants in Hawaii is potted plants from nurseries. These ants can spread very easily this way. Make sure to get plants from areas not infested with ants.
- 22 Little fire ants are so small that a whole colony can nest in a Macadamia nut. Other ants, such as yellow crazy ants, love nesting in rotting coconuts.



# What we have learnt today

- Ants are insects. They have 3 body parts and 6 legs.
- An ant is invasive when it has left its home range and damages the natural environment of its new home.
- Not all ants are invasive. Most do good things for the environment like helping decomposition.
- Some ants are bad because they can cause harm to our farms, human and our environment.
- Ants enter the country in many ways. Everyone must work together for biosecurity.



**See you next time!**  
**Tekeraoi am bong!**

