PRA template 4 (species already present in the territory)

**Pest Risk Analysis (PRA) for**

**Name of organism: *Latin name* (English name)**

**Territory: e.g. Turks & Caicos Islands Assessment Number: 001/year**

**Date: dd/mm/yyyy Version: 1**

**PRA type: alien species already present**

**All sections should be completed. If not applicable indicate it**

**Part 1: Initiation**

**1.1 Summary of assessment results (max. 500 words)**

Give a brief summary of the risks of introduction, establishment, spread, impact and overall risk. Fill this part in at the end of the PRA process, only after you have completed the rest of the PRA template below.

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**1.2 Assessor details**

Institution/Department:

Name and Job Title:

Address:

Phone (office and/or mobile): Email:

**Part 2: Background**

**2.1 Aim of assessment**

This section is intended to put the new organism(s) in perspective of the wider activities having led to conducting this PRA (e.g. recent alerts, signs of increased invasiveness, ongoing control efforts); all technical/scientific words must be explained

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**2.2 Identity**

Identify the organism as fully as possible

**Scientific name (incl. taxonomic authority, date):**

**What is it? (max. 2 sentence description)**

**English name(s):**

**Family:**

**Synonyms:**

**Other taxonomic remarks:**

**2.3 Images of the species if available**

If available, please provide pictures of different stages and habitats

*Figure 1:*

*Figure 2:*

**2.4 Existence of PRAs for this species**

Please indicate if PRAs for this species already exist and which target areas and climatic conditions these cover (for suggestions of websites to check, see guidance notes)

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**2.5 Biology/Ecology**

Please provide background information relevant to your application, covering the bullet points in the box below whenever applicable; see also guidance notes

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| * Growth form and size:
* Habitat:
* Lifecycle (e.g. reproduction and dispersal):
* Hosts:
* Host specificity:
* Associated pathogens, pests or parasites:
* Other:
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**2.6 What is the current distribution of the species?**

**Consider:** native range, history of introduction and invasion outside native range

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**2.7 How did the species first arrive in the territory?**

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|  [ ]  | Ornamental plant |
|  [ ]  | Pet |
|  [ ]  | Crop; garden crop |
|  [ ]  | Fodder plant |
|  [ ]  | Livestock |
|  [ ]  | Living food for livestock or pets |
|  [ ]  | Species for fishing or aquaculture |
|  [ ]  | Human aided accidental introduction |
|  [ ]  | Natural colonisation |
|  [ ]  | Others (please explain) |

**2.8 Have there been multiple introductions?**

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**2.9 Is the species still being imported to the territory?**

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**Part 3: Establishment and spread**

**3.2 Establishment**

3.2.1 Is the species already fully established? Consider: survival and reproduction unassisted by human, adventive establishment; sporadic occurrence; restriction to cultivation or certain habitats (e.g. indoors, urban areas)

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| * Survival:
* Reproduction (self-sustaining population):
 |

3.2.2 Does the territory provide suitable climatic and habitat conditions for a wider establishment? **Consider:** climate similarity between the species global range and the PRA area, availability of the habitat conditions required by the species based on its behaviour elsewhere; identify/name specifically the climate/habitat it might survive? Which land-cover? Justify why and provide landmarks as examples; for definition of human interference see guidance notes 3.2.1

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| * Survival:
* Reproduction (self-sustaining population):
 |

3.2.3 (**only for pests and diseases**) If hosts or vectors are required, are these widely available in the PRA area? **Consider:** abundance of hosts and alternate hosts or vectors and how these are distributed in the PRA area; geographic proximity of hosts to pathway destinations; presence of other suitable species that could be new hosts; compare the known distribution of the pest with ecoclimatic zones in the PRA area; soil factors for soilborne pests; survival strategies; survival in protected cultivation

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**3.3 Spread**

3.3.1 Is the species still spreading or ha it reached maximum spread?

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3.3.2 If the species is still spreading, how fast is the current spread?

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| **How quickly can the species spread? (excluding deliberately assisted by humans)** | Less than 10 m/year. Can’t occupy suitable habitats within next 100 yearsVery slowly [ ]  | Between 10 and 100 m per year. Suitable habitats are likely to be occupied between 50 and 100 yearsSlowly [ ]  | Between 100 and 500 m per year. Suitable habitats are likely to be occupied between 50 and 100 yearsModerate pace [ ]  | > 500 m per year Can occupy suitable habits throughout the territory within 5 to 20 yearsQuickly [ ]  | Can occupy suitable habits throughout the territory within 5 yearsVery quickly [ ]  |
| **Confidence** | High confidence [ ]  | Medium confidence [ ]  | Low confidence [ ]  |  |  |

3.3.3 Is density and abundance in areas where the species has already arrived increasing?

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3.3.4 What are the main means of spread in the territory? **Consider:** rate and distance of spread elsewhere; natural barriers in PRA area, the occurrence of a dispersal vector or commodity

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| * Self-dispersal:
* Direct transport by humans:
* Transport via vehicles (e.g. boat, cars, including tyres):
* Wind drift or via driftwood:
* Water:
* Transport via animals (e.g. berries digested by birds, seeds stuck to wool, etc.):
* Transport with vectors:
* Other:
* How rapidly would the organism spread by natural means?:
 |

**Part 4: Economic and environmental risks**

It is important to look at the potential magnitude of the consequences, and to look at distribution effects (who bears risks). Consider potential maximum impact.

Please, **complete this section, referencing supporting material**. Please cite the material in the text and provide a description of where the information in the application has been sourced in the list of references (e.g. from in-house research, independent research, technical literature, community or other consultation, and provide that information with this application). If the information available is scarce, include information about related species (e.g. same genus or family) clearly indicating that it does not correspond to the organism being assessed.

**4.1 Risks recorded from outside the territory, which are applicable to the territory**

4.1.1 Is the species listed in the following Plant Protection organizations and Invasive lists and if so, what is its status?

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| **America**[COSAVE](https://www.ippc.int/en/partners/regional-plant-protection-organizations/cosave/): yes/no[NAPPO](http://www.pestalert.org/main.cfm): yes/no[OIRSA](http://ns1.oirsa.org.sv): yes/no**Europe**[EPPO](http://www.eppo.int): yes/noEC Plant Health Directive (Council Directive 2000/29/EC): yes/no**Africa**[ARC](http://www.arc.agric.za/arc-ppri/weeds/Pages/Management-of-invasive-alien-plants-.aspx): yes/no**Others:** [CABI CPC](https://www.cabi.org/cpc/) [CABI ISC](https://www.cabi.org/isc/) [GISD](http://www.iucngisd.org/gisd/) **Other organizations relevant for the territory (e.g. regional, national…)** |

4.1.2 Is there any negative impact of the species on the economy, environment or public health recorded from any parts of its current distribution? Please provide a summary of the available information

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4.1.3 Is there a possibility that the strain/population/subspecies currently present in the territory behaves less invasive than future new establishments of this species may do? **Consider**: records from other parts of its introduced range; asses in the context of repeated introduction of ornamentals

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4.1.4 Are there any indication that the species is currently in a lag phase not behaving very invasive? Please, provide supporting evidence from other geographical areas or indications that closely related species have shown to go through a lag phase before.

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**4.2 Economic and socioeconomic effects**

4.2.1 Could the species have or has already any negative effect on economic activities in the territory? Please include any information about specific assessments from areas outside the PRA area including experiences with closely related species with relevance for the area of interest (**consider:** reduction in crop yield or quality; reduction in prices or demand, including export markets; increase in production costs (including costs of control); vectoring of other pests of economic importance; extent of phytosanitary regulations imposed by importing countries)

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| --- |
| * Agriculture:
* Livestock:
* Fisheries:
* Aquaculture:
* Forestry:
* Tourism:
* Recreational potential:
* Infrastructure:
* Employment rates:
* Other:
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4.2.2 Are there any risks of impacts or impacts the species already on cultural valuable species, habitats, landscapes, practices or other values? Please include any information about specific assessments from areas outside the PRA area including experiences with closely related species with relevance for the area of interest

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| * Competition with or impact on cultural valuable species:
* Impact on historically valuable practices:
* Change of landscape:
* Value of landscape for recreation:
* Other:
 |

**Summary existing economic and socioeconomic impacts**

Make sure the summary score is well linked with the information reported above so the scoring is fully justified (for more information risk levels see guidance notes)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Existing risk of socioeconomic impact**  | Very small [ ]  | Small [ ]  | Medium [ ]  | Large [ ]  | Very large [ ]  |
| **Confidence** | High confidence [ ]  | Medium confidence [ ]  | Low confidence [ ]  |  |  |

**Summary predicted economic and socioeconomic impacts**

Make sure the summary score is well linked with the information reported above so the scoring is fully justified (for more information risk levels see guidance notes)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Predicted risk of socioeconomic impact**  | Very small [ ]  | Small [ ]  | Medium [ ]  | Large [ ]  | Very large [ ]  |
| **Confidence** | High confidence [ ]  | Medium confidence [ ]  | Low confidence [ ]  |  |  |

**4.3 Impact on public health**

4.3.1 Could there be or is there already any impact on public health? **Consider:** Can the species be disease-causing or be a parasite, or be a vector or reservoir for human diseases?

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**Summary existing public health impact**

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| --- | --- | --- | --- | --- | --- |
| **Existing risk of impact on public health** | Very small [ ]  | Small [ ]  | Medium [ ]  | Large [ ]  | Very large [ ]  |
| **Confidence** | High confidence [ ]  | Medium confidence [ ]  | Low confidence [ ]  |  |  |

**Summary predicted public health impact**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Predicted risk of impact on public health** | Very small [ ]  | Small [ ]  | Medium [ ]  | Large [ ]  | Very large [ ]  |
| **Confidence** | High confidence [ ]  | Medium confidence [ ]  | Low confidence [ ]  |  |  |

**4.4 Impact on animal health**

Could there be any or is there already be an impact on animal health? **Consider:** Can the species be disease-causing or be a parasite, or be a vector or reservoir for animals?

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**Summary existing animal health impact**

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| --- | --- | --- | --- | --- | --- |
| **Existing risk of impact on animal health** | Very small [ ]  | Small [ ]  | Medium [ ]  | Large [ ]  | Very large [ ]  |
| **Confidence** | High confidence [ ]  | Medium confidence [ ]  | Low confidence [ ]  |  |  |

**Summary predicted animal health impact**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Predicted risk of impact on animal health** | Very small [ ]  | Small [ ]  | Medium [ ]  | Large [ ]  | Very large [ ]  |
| **Confidence** | High confidence [ ]  | Medium confidence [ ]  | Low confidence [ ]  |  |  |

**4.5. Environmental and ecosystem effects**

4.5.1 Are there any threats, current or predicted to native or endemic species? Indicate direct effects on native species; note any aspects related to pollination of native species should be covered in the following question (**consider**: threat to endangered species; impact on keystone species; changed community structure; hybridization with native species)

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4.5.2 What is the level of current or potential negative impact on ecosystem services in the PRA area? (**consider**: provisioning services (freshwater, wood and fibre, fuel); regulating services (soil formation, natural hazards, water and air quality); cultural services (aesthetic, educational, recreational, spiritual); supporting services (nutrient cycling, habitat stability; pollination) see also guidance notes 4.5.2

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**Summary existing** **environmental impact**

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| --- | --- | --- | --- | --- | --- |
| **Existing risk of environmental impact**  | Very small [ ]  | Small [ ]  | Medium [ ]  | Large [ ]  | Very large [ ]  |
| **Confidence** | High confidence [ ]  | Medium confidence [ ]  | Low confidence [ ]  |  |  |

**Summary predicted environmental impact**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Predicted risk of environmental impact**  | Very small [ ]  | Small [ ]  | Medium [ ]  | Large [ ]  | Very large [ ]  |
| **Confidence** | High confidence [ ]  | Medium confidence [ ]  | Low confidence [ ]  |  |  |

**Part 5: Pest risk management**

**5.1 Eradication**

5.1.1 Is eradication still feasible? **Consider**: suitable methods, scale, costs, previous attempts

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5.1.2 Are there any eradication efforts currently underway? Please describe methods, scale of effort and costs

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**Likelihood of eradication being successful**

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| --- | --- | --- | --- | --- | --- |
| **Probability of eradication attempts being effective** | Very unlikely [ ]  | Unlikely [ ]  | Moderately likely [ ]  | Likely [ ]  | Very likely [ ]  |
| **Confidence** | High confidence [ ]  | Medium confidence [ ]  | Low confidence [ ]  |  |  |

**5.2 Containment**

5.2.1 Is containment to certain areas of the territory still feasible? **Consider**: suitable methods, scale, costs, previous attempts

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5.2.2 Are there any containment efforts currently underway? Please describe methods, scale of effort and costs

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**Likelihood of containment being successful**

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| --- | --- | --- | --- | --- | --- |
| **Probability of containment attempts being effective** | Very unlikely [ ]  | Unlikely [ ]  | Moderately likely [ ]  | Likely [ ]  | Very likely [ ]  |
| **Confidence** | High confidence [ ]  | Medium confidence [ ]  | Low confidence [ ]  |  |  |

**5.3 Control**

5.3.1 In case no control has been attempted, what methods are available to be deployed in the future for the control (short-term and long-term) of this species? **Consider**: suitable methods, scale, costs

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5.3.2 Are there any control efforts currently underway? Please describe methods, scale of effort and costs, efficacy, sustainability

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5.3.3 Are there any additional control strategies feasible to be deployed in the future such as classical biological control? Please describe methods, experiences in other geographical areas, sustainability, benefits, risks and costs.

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5.3.4 To what degree are current control efforts successful in mitigation the risks described above?

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5.3.5 To what degree are additional control efforts/methods likely to mitigate the risks described above?

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**Likelihood of current control strategy being successful**

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| --- | --- | --- | --- | --- | --- |
| **Probability of containment attempts being effective currently** | Very unlikely [ ]  | Unlikely [ ]  | Moderately likely [ ]  | Likely [ ]  | Very likely [ ]  |
| **Confidence** | High confidence [ ]  | Medium confidence [ ]  | Low confidence [ ]  |  |  |

**Likelihood of future control strategies being successful**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Probability of containment attempts being effective in the future** | Very unlikely [ ]  | Unlikely [ ]  | Moderately likely [ ]  | Likely [ ]  | Very likely [ ]  |
| **Confidence** | High confidence [ ]  | Medium confidence [ ]  | Low confidence [ ]  |  |  |

**5.4 Risk of reintroduction after eradication**

5.4.1 Has the species been introduced into other countries and/or have multiple introductions been reported? Please, check existing interception data in the territory

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5.4.2 What are the likely pathways for the accidental introduction of the species?

Consider whether the species or some of its life-stages can easily be overlooked?

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5.4.3 What is the probability of the pest evading existing biosecurity procedures? **Consider:** inspection methods and quality control; certification schemes; chemical treatment. Have likely pathways of previous introduction(s) been closed?

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**Summary probability of accidental re-introduction after eradication**

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| --- | --- | --- | --- | --- | --- |
| **Probability of introduction in next 10 years** | Very unlikely [ ]  | Unlikely [ ]  | Moderately likely [ ]  | Likely[ ]   | Very likely [ ]  |
| **Confidence** | High confidence [ ]  | Medium confidence [ ]  | Low confidence [ ]  |  |  |

**Other information**

Add here any further information you wish to include in this application including if there are any ethical considerations that you are aware of in relation to your application

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**Is there a need for a more detailed PRA or for more detailed analysis of particular sections of the PRA?** (For completion by the Biosecurity team only)

No [ ]  Yes [ ]

If yes, please forward to FERA or NNSS or other suitable organisations

**References and information sources consulted**

Occurrences from Gbif.org

www.Palmpedia.net

Florida University

**Appendices and referenced material (if any) and glossary (if required)**

In case this is an application made for the deliberate introduction of a species/commodity it is recommended that you contact a member of the Biosecurity team as early in the application process as possible. Biosecurity can assist you with any questions you have during the preparation of your application including providing advice on any consultation requirements.

Unless otherwise indicated, all sections of this form must be completed for the application to be formally received and assessed. If a section is not relevant to your application, please provide a comprehensive explanation why this does not apply.

Commercially sensitive information must be included in an appendix to this form, and be identified as confidential. If you consider any information to be commercially sensitive, please indicate this in the relevant section of this form and cross reference to where that information is located in the confidential appendix.

Any information you supply to Biosecurity prior to formal submission of your application will not be publicly released. Following formal submission of your application, any information in the body of this application form and any non-confidential appendices will become publicly available.