**Appendix 2** - Risk assessment protocol with answers for *Momordica charantia* assessed in the manuscript.

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| **INSTITUTO HÓRUS DE DESENVOLVIMENTO E CONSERVAÇÃO AMBIENTAL** |
| **Risk Assessment for exotic plants** | ***Momordica charantia*** |
| **Section** | **Group** | **No** | **Question** | **melón amargo** |
| **Biogeographic history** |
| A | Cultivation / Domestication | 1.01 | Is there strong evidence of domestication? | yes |
| 1.02 | Are there records of the taxon spreading spontaneously in places where it has been domesticated? | yes |
| 1.03 | Are taxa of the species registered as weeds or nuisance species? | yes |
| Climate | 2.01 | Does the taxon occur naturally, or are there records of establishment in some region of ecuatorial and semiarid climate? | yes |
| 2.02 | Does the taxon occur naturally, or are there records of establishment in some region of climate of plains and humid heights? | yes |
| 2.03 | Does the taxon occur naturally, or are there records of establishment in some region with a rainy and humid temperate equatorial climate? | yes |
| Records of occurrrence and invasion | 3.01 | Is there history of repeated introductions outside its native range? | yes |
| 3.02 | Are there records of establishment outside its historically known native range? | yes |
| 3.03 | Is there evidence of impacts in gardens, infrastructure or degraded areas? | no |
| 3.04 | Are there records of impacts in agriculture, cattle raising, silviculture or horticulture? | yes |
| 3.05 | Are there records of invasion in natural areas anywhere in the world? | no |
| 3.06 | Are other species in the same genus considered invasive in other parts of the world or are they established in Brazil? | yes |
| **Undesirable traits** |
| B | Undesirable traits | 4.01 | Does the taxon have thorns, spines or burrs, or other structures that might harm people or block the passage of people or animals? | no |
| 4.02 | Is there evidence that the taxon produces chemical changes in the soil? (allelopathy, pH changes, nitrogen fixation, others) | yes |
| 4.03 | Is the taxon a parasite? | no |
| 4.04 | Is the taxon unpalatable to native or introduced grazing animals? | yes |
| 4.05 | Is the taxon toxic to humans or to economically important native or introduced domesticated animals? | yes |
| 4.06 | Are there records of the taxon as a host or vector of known pests or pathogens that may affect economically important species? | yes |
| 4.07 | Is the taxon allergenic to humans? | no |
| Habit and potential competition for resources in natural areas | 5.01 | Is there evidence that the taxon produces physical changes in ecological cycles? (Such as increasing the risk of fire, erosion, or altering the water cycle) |   |
| 5.02 | Does the taxon tolerate shade in any phase of its life cycle? | no |
| 5.03 | Does the taxon tolerate sandy, acidic or low fertility soils? | yes |
| 5.04 | Is the taxon a climber or does it have another growth form that may suffocate or supress other plants? | yes |
| 5.05 | Does the taxon form dense thickets (especially woody perennials)? | no |
| 5.06 | Is the taxon a tree, perennial woody shrub, herb, grass or geophyte? (If none of these, "no") reply "tree" or "shrub" or "herb" or "grass" or "geophyte" or "no" | herb |
| **Biological and ecological traits** |
| C | Reproductive mechanisms | 6.01 | Is there evidence of biotic factors in the taxon native range that reduce its reproductive output? |  |
| 6.02 | Does the taxon produce viable seeds? | yes |
| 6.03 | Is there evidence that the taxon is capable of interspecific hybridization? |   |
| 6.04 | Is there an endemic congener in the country? | no  |
| 6.05 | Is the taxon capable of self-pollination or apomixis? | no |
| 6.06 | Does the taxon require specialized pollinators? | no |
| 6.07 | Does the taxon reproduce by vegetative fragments other than apomictic or geophytic? | yes  |
| 6.08 | How long is the juvenile period? [a] up to 1 year; [b] 1-4 years; [c] more than 4 years | a |
| Dispersal mechanisms | 7.01 | Is the taxon dispersed involuntarily by people, machinery, etc.? | yes |
| 7.02 | Is the taxon dispersed intentionally or is it cultivated by people? | yes |
| 7.03 | Are the propagules likely to be dispersed as product contaminants? |  |
| 7.04 | Are the propagules wind-dispersed? | no |
| 7.05 | Are the propagules dispersed by water? | no |
| 7.06 | Are the propagules dispersed by birds or bats? | yes |
| 7.07 | Are the propagules dispersed by animals (externally)? | yes |
| 7.08 | Are the propagules dispersed by animals that feed on the fruit and the seeds survive the passage through the digestive system? | yes |
| Persistence attributes | 8.01 | Is the taxon a prolific seeder? | yes |
| 8.02 | Is there evidence that the seeds remain viable in the soil longer than one year? | no |
| 8.03 | Is it viable and easy to find an efficient control method at reasonable cost? | yes |
| 8.04 | Are there any efficient natural predators present in the country? |   |