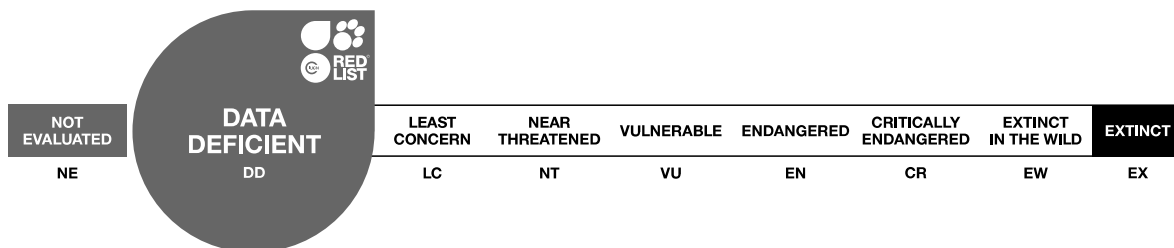


## *Temelucha nigerrima*

Assessment by: Nunes, R. & Borges, P.A.V.



View on [www.iucnredlist.org](http://www.iucnredlist.org)

**Citation:** Nunes, R. & Borges, P.A.V. 2021. *Temelucha nigerrima*. *The IUCN Red List of Threatened Species* 2021: e.T124929073A124930886. <https://dx.doi.org/10.2305/IUCN.UK.2021-1.RLTS.T124929073A124930886.en>

**Copyright:** © 2021 International Union for Conservation of Nature and Natural Resources

*Reproduction of this publication for educational or other non-commercial purposes is authorized without prior written permission from the copyright holder provided the source is fully acknowledged.*

*Reproduction of this publication for resale, reposting or other commercial purposes is prohibited without prior written permission from the copyright holder. For further details see [Terms of Use](#).*

*The IUCN Red List of Threatened Species™ is produced and managed by the [IUCN Global Species Programme](#), the [IUCN Species Survival Commission \(SSC\)](#) and [The IUCN Red List Partnership](#). The IUCN Red List Partners are: [Arizona State University](#); [BirdLife International](#); [Botanic Gardens Conservation International](#); [Conservation International](#); [NatureServe](#); [Royal Botanic Gardens, Kew](#); [Sapienza University of Rome](#); [Texas A&M University](#); and [Zoological Society of London](#).*

*If you see any errors or have any questions or suggestions on what is shown in this document, please provide us with [feedback](#) so that we can correct or extend the information provided.*

## Taxonomy

| Kingdom  | Phylum     | Class   | Order       | Family        |
|----------|------------|---------|-------------|---------------|
| Animalia | Arthropoda | Insecta | Hymenoptera | Ichneumonidae |

**Scientific Name:** *Temelucha nigerrima* Horstmann & Yu, 1999

## Assessment Information

**Red List Category & Criteria:** Data Deficient [ver 3.1](#)

**Year Published:** 2021

**Date Assessed:** March 28, 2018

### Justification:

*Temelucha nigerrima* is an endemic ichneumonid wasp species of the Azores (Portugal), recorded from the islands of Faial, Terceira and S. Miguel, including a site that is currently the Nature Reserve of Caldeira do Faial. From the historical data, this species potentially has a limited Extent of Occurrence (8,520 km<sup>2</sup>) and a small Area of Occupancy (56 km<sup>2</sup>). Given that some sites of its description are disturbed, it is possible that this species has declined in the past as a result of human activity. The present situation of this species needs to be further assessed, and further research is needed into its population, distribution, threats, ecology, life history and indigenous host species. Conservation/restoration of native habitats, as well as invasive plant species control, could potentially aid this species' conservation. Based upon the lack of recent data regarding this species' population, distribution, threats, ecology and hosts, it is not possible to accurately estimate the extinction risk of the species and it could theoretically fall into any category. Therefore, this species is assessed as Data Deficient (DD).

## Geographic Range

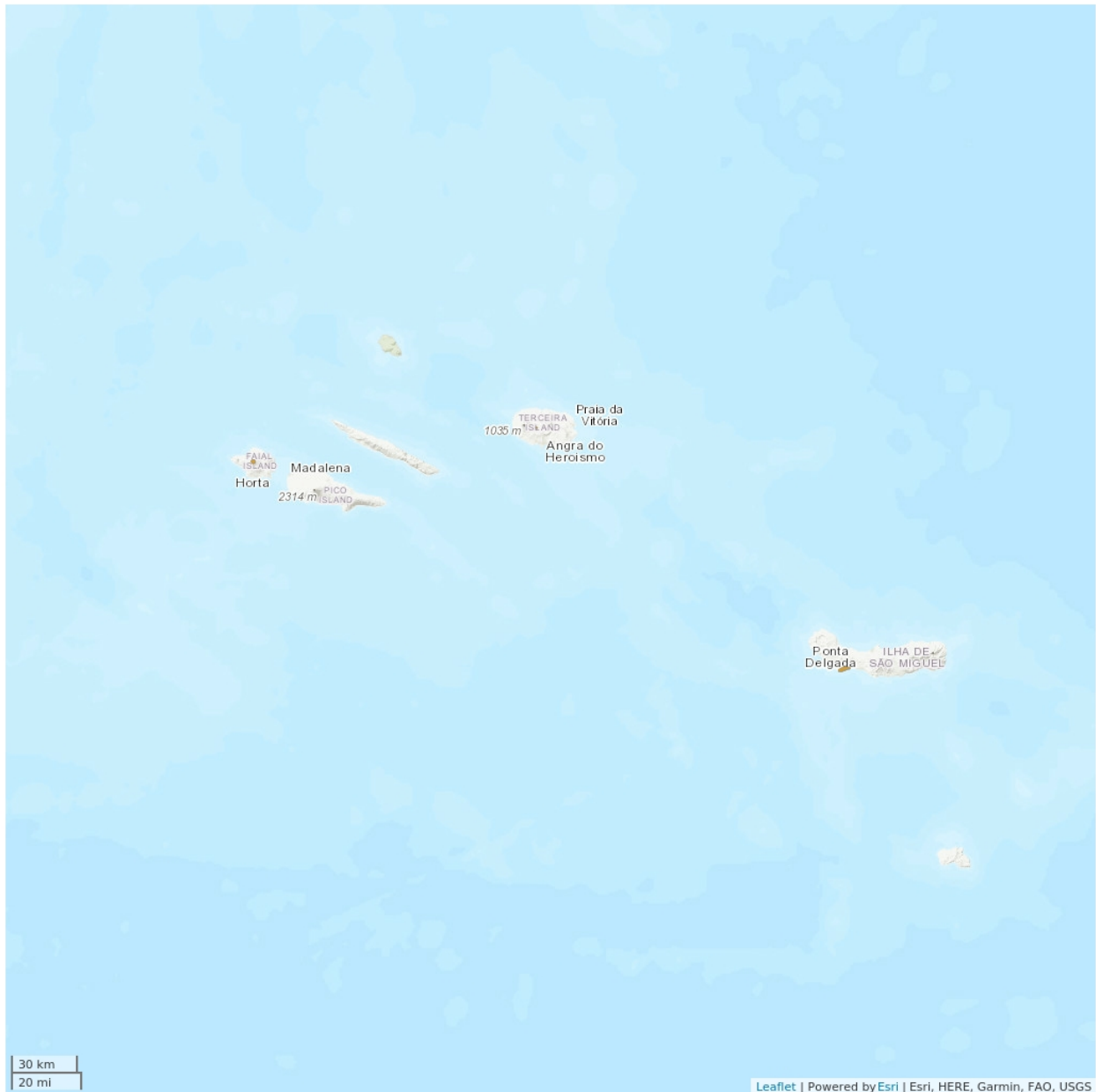
### Range Description:

*Temelucha nigerrima* is an Azorean-endemic ichneumonid wasp species described from Faial, Terceira and S. Miguel islands (Azores, Portugal). It has been collected in some currently disturbed habitats and in a site that is currently a Nature Reserve (Caldeira do Faial). Based on the data from the 1938 expedition of Frey, Stora and Cedercreutz, the Extent of Occurrence (EOO) would be ca. 8,520 km<sup>2</sup> and the Area of Occupancy (AOO) would be ca. 56 km<sup>2</sup>. However, there is no recent information regarding the distribution of this species, and the actual full distribution of the species is unknown.

### Country Occurrence:

**Native, Extant (resident):** Portugal (Azores)

# Distribution Map

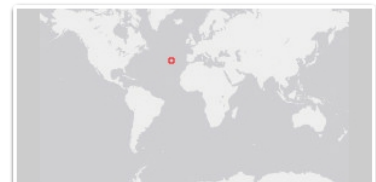
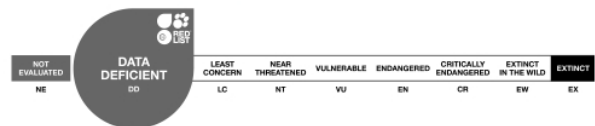


## Legend

■ EXTANT (RESIDENT)

## Compiled by:

Azorean Biodiversity Group 2018



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.

## Population

There are no available data on the population size and trend of this species.

**Current Population Trend:** Unknown

## Habitat and Ecology (see Appendix for additional information)

The ecology and traits of this species are unknown. Other ichneumonid wasps from the subfamily Cremastinae are koinobiont endoparasitoids of Lepidoptera larvae, such as leaf miner or leaf roller larvae (Goulet and Huber 1993). This subfamily has a worldwide distribution (Goulet and Huber 1993). This species was described from a site that currently a Nature Reserve (Caldeira do Faial), but also from a urbanised area and from semi-natural pastures.

**Systems:** Terrestrial

## Threats (see Appendix for additional information)

A lack of information regarding the present status of this species or its unknown indigenous hosts precludes an assessment of potential threats. Nevertheless, this species might be affected by future habitat declines as a consequence of climate change (Ferreira *et al.* 2016). Given that some of the areas from where this species was described were and are currently disturbed, it can be assumed that habitat degradation caused by past and present human disturbance and land use changes, or by invasive species might also potentially affect or have affected this species or its indigenous hosts.

## Conservation Actions (see Appendix for additional information)

This species is not protected by regional law. Further research is needed into its population, distribution, threats, ecology and life history as well as into its hosts. Conservation/restoration of native habitats, as well as invasive plant species control, could potentially aid this species' conservation. Historically at least, this species was present in areas that are currently included in the Natural Parks of Pico and Terceira.

## Credits

**Assessor(s):** Nunes, R. & Borges, P.A.V.

**Reviewer(s):** Russell, N.

## Bibliography

Ferreira, M.T., Cardoso, P., Borges, P.A.V., Gabriel, R., Azevedo, E.B., Reis, F., Araújo, M.B. and Elias, R.B. 2016. Effects of climate change on the distribution of indigenous species in oceanic islands (Azores). *Climate Change* 138(3-4): 603-615.

Goulet, H. and Huber, J.T. 1993. *Hymenoptera of the World: an identification guide to families*. Research Branch, Agriculture Canada, Ottawa.

IUCN. 2021. The IUCN Red List of Threatened Species. Version 2021-1. Available at: [www.iucnredlist.org](http://www.iucnredlist.org). (Accessed: 25 March 2021).

## Citation

Nunes, R. & Borges, P.A.V. 2021. *Temelucha nigerrima*. *The IUCN Red List of Threatened Species* 2021: e.T124929073A124930886. <https://dx.doi.org/10.2305/IUCN.UK.2021-1.RLTS.T124929073A124930886.en>

## Disclaimer

To make use of this information, please check the [Terms of Use](#).

## External Resources

For [Supplementary Material](#), and for [Images and External Links to Additional Information](#), please see the Red List website.

## Appendix

### Habitats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

| Habitat  | Season   | Suitability | Major Importance? |
|--|----------|-------------|-------------------|
| 1. Forest -> 1.4. Forest - Temperate   | Resident | Suitable    | Yes               |
| 5. Wetlands (inland) -> 5.5. Wetlands (inland) - Permanent Freshwater Lakes (over 8ha) | Resident | Suitable    | Yes               |
| 14. Artificial/Terrestrial -> 14.2. Artificial/Terrestrial - Pastureland               | Resident | Suitable    | -                 |
| 14. Artificial/Terrestrial -> 14.5. Artificial/Terrestrial - Urban Areas               | Resident | Unknown     | -                 |

### Threats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

| Threat   | Timing    | Scope   | Severity                         | Impact Score |
|--|-----------|---|----------------------------------|--------------|
| 2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.3. Agro-industry grazing, ranching or farming                       | Ongoing   | Unknown   | Slow, significant declines       | Unknown      |
|  | Stresses: | 1. Ecosystem stresses -> 1.1. Ecosystem conversion<br>1. Ecosystem stresses -> 1.2. Ecosystem degradation   |                                  |              |
| 8. Invasive and other problematic species, genes & diseases -> 8.1. Invasive non-native/alien species/diseases -> 8.1.1. Unspecified species | Ongoing   | Unknown   | Causing/could cause fluctuations | Unknown      |
|  | Stresses: | 1. Ecosystem stresses -> 1.2. Ecosystem degradation<br>1. Ecosystem stresses -> 1.3. Indirect ecosystem effects   |                                  |              |
| 11. Climate change & severe weather -> 11.1. Habitat shifting & alteration   | Future    | Unknown   | Slow, significant declines       | Unknown      |
|  | Stresses: | 1. Ecosystem stresses -> 1.1. Ecosystem conversion<br>1. Ecosystem stresses -> 1.2. Ecosystem degradation<br>1. Ecosystem stresses -> 1.3. Indirect ecosystem effects |                                  |              |

### Conservation Actions in Place

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

| Conservation Action in Place               |
|--|
| In-place research and monitoring           |
| Action Recovery Plan: No                   |
| Systematic monitoring scheme: No           |
| In-place land/water protection             |
| Occurs in at least one protected area: Yes |

## Conservation Actions Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

|  |
|--|
| <b>Conservation Action Needed</b>                                      |
| 2. Land/water management -> 2.1. Site/area management                  |
| 2. Land/water management -> 2.2. Invasive/problematic species control  |
| 2. Land/water management -> 2.3. Habitat & natural process restoration |

## Research Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

|  |
|--|
| <b>Research Needed</b>                                     |
| 1. Research -> 1.2. Population size, distribution & trends |
| 1. Research -> 1.3. Life history & ecology                 |
| 1. Research -> 1.5. Threats                                |
| 3. Monitoring -> 3.1. Population trends                    |
| 3. Monitoring -> 3.4. Habitat trends                       |

## Additional Data Fields

|   |
|---|
| <b>Distribution</b>   |
| Continuing decline in area of occupancy (AOO): Unknown      |
| Extreme fluctuations in area of occupancy (AOO): Unknown    |
| Continuing decline in extent of occurrence (EOO): Unknown   |
| Extreme fluctuations in extent of occurrence (EOO): Unknown |
| Continuing decline in number of locations: Unknown          |
| Extreme fluctuations in the number of locations: Unknown    |
| Lower elevation limit (m): 5                                |
| Upper elevation limit (m): 800                              |
| <b>Population</b>   |
| Continuing decline of mature individuals: Unknown           |
| Extreme fluctuations: Unknown                               |
| Population severely fragmented: Unknown                     |

## The IUCN Red List Partnership



The IUCN Red List of Threatened Species™ is produced and managed by the [IUCN Global Species Programme](#), the [IUCN Species Survival Commission \(SSC\)](#) and [The IUCN Red List Partnership](#).

The IUCN Red List Partners are: [Arizona State University](#); [BirdLife International](#); [Botanic Gardens Conservation International](#); [Conservation International](#); [NatureServe](#); [Royal Botanic Gardens, Kew](#); [Sapienza University of Rome](#); [Texas A&M University](#); and [Zoological Society of London](#).