# GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Icerya purchasi***

***Icerya purchasi*** **System:** Terrestrial

| Kingdom | Phylum | Class | Order | Family |
|---|---|---|---|---|
| Animalia | Arthropoda | Insecta | Hemiptera | Margarodidae |

**Common name** cottony cushion scale (English)

**Synonym**

**Similar species**

**Summary** The cottony cushion scale insect *Icerya purchasi* causes the decline of indigenous plants on the Galapagos Islands, Ecuador.

view this species on IUCN Red List

**Nutrition**
The cottony cushion scale insect feeds on plant sap (Charles Darwin foundation 2006b).

**General Impacts**
The cottony cushion scale *Icerya purchasi* causes the premature loss of fruits and leaves, dieback of branches and death of some Galapagos plants and threatens valuable natural habitats particularly mangrove stands. *I. purchasi* also produces large quantities of honeydew which may encourage the growth of black sooty moulds that cover the leaves of the plant preventing photosynthesis (Charles Darwin foundation 2006b).

**Management Info**
The Australian ladybug *Rodalia cardinalis* Mulsant (Coleoptera: Coccinellidae) has been under investigation as a potential and safe biocontrol agent for the cottony cushion scale insect in the Galapagos Islands (Hoddle 2004; Causton *et al*, 2004). Preliminary results appear positive. Before the release of *R. cardinalis*, the mangrove stands of the town of Puerto Ayora on Santa Cruz Island were blackened and dying from the effects of the cottony cushion scale. These mangroves are now green and thriving (Charles Darwin foundation 2006a).

**Principal source:**

**Compiler:** IUCN SSC Invasive Species Specialist Group (ISSG) with support from the EU-funded South Atlantic Invasive Species project, coordinated by the Royal Society for the Protection of Birds (RSPB)

**Review:**

**Pubblication date:** 2009-04-28

**ALIEN RANGE**

**[1]** BERMUDA
**[1]** MONTSERRAT
**[1]** ECUADOR
**[2]** SAINT HELENA

**Red List assessed species 4: CR = 4;**

Camarhynchus heliobates **CR**
Euphorbia origanoides **CR**
Medicago citrina **CR**
Scalesia atractyloides **CR**

## BIBLIOGRAPHY

**10** references found for **Icerya purchasi**

**Managment information**

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Causton, C.E., Lincango, M.P., and Poulsom, T.G.A. 2004. Feeding range studies of *Rodolia cardinalis* (Mulsant), a candidate biological control agent of Icerya purchasi Maskell in the Gal&#65533;pagos Islands. Biol. Control 29(3):315-325.

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Charles Darwin Foundation for the Galapagos Islands, Galapagos, Ecuador. 2006b. Charles Darwin Research Station Fact Sheet Australian Ladybug &#65533; Biological Control of Cottony Cushion Scale

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Hoddle, Mark, S., 2004. Restoring Balance: Using Exotic Species to Control Invasive Exotic Species (p 38-49) Volume 18 Issue 1 , Pages 1 - 289 (February 2004)

Kenis, Marc, Marie-Anne Auger-Rozenberg, Alain Roques, Laura Timms, Christelle Pere, Matthew J. W. Cock, Josef Settele, Sylvie Augustin, Carlos Lopez-Vaamonde. 2009. Ecological effects of invasive alien insects In Langor, David W.; Sweeney, Jon ., 2009 Ecological Impacts of Non-Native Invertebrates and Fungi on Terrestrial Ecosystems ELLIBS E-BOOK

Pickup, A.R. 1999 Ascension Island Mangement Plan Published by The Royal Society for the Protection of Birds, Sandy, Beds, UK.

**General information**

Gray, A. 2003. *Euphorbia origanoides*. In: IUCN 2008. 2008 IUCN Red List of Threatened Species. . Downloaded on 06 November 2008

**Summary:** Available from: http://www.iucnredlist.org/details/43921 [Accessed 25 October 2009]

ITIS (Integrated Taxonomic Information System), 2009. Online Database *Icerya purchasi* Maskell, 1878

**Summary:** An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals.

Available from: http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=200699 [Accessed 25 October 2009]