Cucurbitaceae

Cucumis sativus

China

3 eggs laid but unable to complete life-cycle (unclear to which weevil species this refers)

8 fed and survived for 38 days, no feeding in multiple choice tests (unclear to which weevil species this refers)

10 some feeding but unable to complete development (unclear to which weevil species this refers)

Cyperaceae

Eleocharis haumaniana

Argentina

8 0.09 feeding scars/weevil/day vs 7.58 on water hyacinth

Fabaceae

Dolichos lablab

India

8 slight feeding (scraping of leaf epidermis) and survived for 18 days, no feeding in multiple choice tests

Vigna sinensis

India

8 slight feeding (scraping of leaf epidermis) and survived for 37 days, no feeding in multiple choice tests

Hydrocharitaceae

Hydrilla sp.

India

8 slight feeding (scraping of leaf epidermis) and survived for 47 days, no feeding in multiple choice tests

Vallisneria sp.

India

4 adult fed and survived for 38 days, 3 fertile eggs laid, larvae died within 2 days of hatching, no feeding in multiple choice tests

Lamiaceae

Mentha arvensis

India

8 slight feeding (scraping of leaf epidermis) and survived for 39 days, no feeding in multiple choice tests

Lemnaceae

Lemna sp. (either *L. gibba* or *L. parodiana* Giaredelli)

Argentina

3 less than 0.5 eggs/female/day vs 3.5 on water hyacinth

8 less than 3 feeding spots/weevil/day vs 17/day for water hyacinth

Spirodela intermedia

Argentina

3 1 egg/female/day vs 3.5 on water hyacinth

8 less than 3 feeding spots/weevil/day vs 17/day for water hyacinth

Liliaceae

Allium cepa

Argentina

8 0.03 feeding scars/weevil/day vs 7.58 on water hyacinth

Amaryllis sp.

India

4 adult fed and survived for 40 days, single infertile egg laid in decaying plant tissue

Asparagus officinalis

Argentina

5 0.001 feeding scars/weevil/day vs 4.01 on water hyacinth

8 0.12 feeding scars/weevil/day vs 7.58 on water hyacinth

Musaceae

Musa paradisiaca

India

8 fed and survived for 56 days, no feeding in multiple choice tests

10 placement of 3 first instars, no survival beyond 3 days

Uganda

9 63 feeding scars vs 1838 on water hyacinth in petri dishes but no damage in cage tests

Musa sp.

Vietnam

9 53 feeding scars vs 220-338 on water hyacinth

Onagraceae

Ludwigia peploides

Argentina

3 less than 0.5 eggs/female/day vs 3.5 on water hyacinth

8 less than 3 feeding scars/weevil/day vs 17/day for water hyacinth

Vietnam

9 70 feeding scars vs 220-338 on water hyacinth

Orchidaceae

Vanilla fragrans

India

8 slight feeding (scraping of leaf epidermis) and survived for 36 days, no feeding in multiple choice tests

Philydraceae

Philydrum lanuginosum

Australia

7 average of 1.3 feeding scars vs 830.7 feeding scars

Poaceae

Saccharum officinarum

Argentina

1 2 eggs laid vs 749 on water hyacinth

Pontederiaceae

Eichhornia azurea

Argentina

1 14 eggs laid vs 749 on water hyacinth

3 less than 0.25 eggs/female/day vs 3.0/day for water hyacinth

5 0.125 feeding scars/weevil/day vs 4.01 on water hyacinth

7 7.36 feeding scars/weevil/day vs. 13.49/day on water hyacinth (on average)

8 4.86 feeding scars/weevil/day vs 7.58 on water hyacinth

10 placement of eggs, resulting in 2 larvae vs 9 pupae in water hyacinth

10 placement of first instars, 3 possible points of larval tunneling vs 12/15 larvae or pupae after 15 days in water hyacinth

Monochoria cyanea

Australia

3 eggs laid, 2 larvae recovered resulting in 0 adults; vs. 69 larvae recovered from water hyacinth, 30 larvae transferred to new plants resulted in 23 adults

7 average of 1.7 feeding scars vs 910.0 on water hyacinth

8 average of 45 feeding scars/plant after 5 days vs 234.3 on water hyacinth

Monochoria hastata

Thailand

9 feeding occurred but unable to complete life-cycle

Vietnam

9 84 feeding scars vs 220-338 on water hyacinth

Monochoria vaginalis

Australia

3 eggs laid, 12 larvae recovered resulting in 1 adult; vs. 51 larvae recovered from water hyacinth, 30 larvae transferred to new plants resulted in 20 adults

7 mean 20.0 feeding scars vs 768.0 on water hyacinth; 1 egg laid

8 average of 54.7 feeding scars/plant after 5 days vs 147.0 on water hyacinth

Thailand

9 feeding occurred but unable to complete life-cycle

Pontederia lanceolata

Argentina

3 less than 0.25 eggs/female/day vs 3.0/day for water hyacinth

5 0.01 feeding scars/weevil/day vs 4.01 on water hyacinth

7 2.55 feeding scars/weevil/day vs. 13.49/day on water hyacinth (on average)

8 3.48 feeding scars/weevil/day vs 7.58 on water hyacinth

10 placement of eggs, resulting in 1 larval tunnel vs 9 pupae in water hyacinth

Reussia rotundifolia

Argentina

3 ~0.2 eggs/female/day vs ~2.75 on water hyacinth

8 5.91 feeding scars/weevil day vs. 9.80 on water hyacinth,

10 placement of first instars, 2 pupae, 1 lge larva from 32 eggs vs 16 pupae from 16 eggs on water hyacinth

Salviniaceae

Salvinia sp.

Vietnam

9 10 feeding scars vs 220-338 on water hyacinth

Trapaceae

Trapa bispinosa

India

4 adult fed and survived for 42 days, 5 fertile eggs laid, larvae died within 3 days of hatching, no feeding in multiple choice tests

10 placement of 25 older larvae, no survival beyond 4 days

Typhaceae

Typha latifolia

Argentina

5 0.001 feeding scars/weevil/day vs 4.01 on water hyacinth

Umbelliferae

Daucus carota

Argentina

8 0.1 feeding scars/weevil/day vs 7.58 on water hyacinth

Appendix 3

Summary results of host-specificity tests carried out on *N. eichhorniae* for which some damage was recorded. Results detail the country in which the test was made, the basic test design, and the outcome of the trial. The test designs used were: 1. Oviposition - multiple choice with host; 2. Oviposition - multiple choice, presence of host unknown; 3. Oviposition - no choice; 4. Oviposition - unknown design; 5. Adult feeding/survival - multiple choice with host; 6. Adult feeding/survival - multiple choice, presence of host unknown; 7. Adult feeding/survival - paired choice; 8. Adult feeding/survival - no choice; 9. Adult feeding/survival - unknown design; 10. Development following placement of eggs or larvae.

Alismataceae

Sagittaria trifolia

China

8 fed and survived for 29 days, no feeding in multiple choice tests (unclear to which weevil species this refers)

Araceae

Amorphophallus sp.

India

8 slight feeding (scraping of leaf epidermis) and survived for 34 days, no feeding in multiple choice tests

Pistia stratiotes

India

8 fed and survived for 75 days, no feeding in multiple choice tests

10 placement of 3 first instars, no survival beyond 3 days

Zimbabwe

9 0.03 feeding scars/weevil/day vs 9.83 on water hyacinth (unclear to which weevil species this refers)

Begoniaceae

Begonia sp.

India

8 slight feeding (scraping of leaf epidermis) and survived for 33 days, no feeding in multiple choice tests

Brassicaceae

Brassica caulorapa

China

8 fed and survived for 36 days, no feeding in multiple choice tests (unclear to which weevil species this refers)

Brassica oleracea

India

8 slight feeding (scraping of leaf epidermis) and survived for 43 days, no feeding in multiple choice tests

Brassica oleracea var. *capitata*

Zimbabwe

9 0.01 feeding scars/weevil/day vs 9.83 on water hyacinth (unclear to which weevil species this refers)

Brassica pekinensis

China

8 some feeding but unable to complete development (unclear to which weevil species this refers)

10 fed and survived for 24 days, no feeding in multiple choice tests (unclear to which weevil species this refers)

Raphanus sativus

India

8 slight feeding (scraping of leaf epidermis) and survived for 23 days, no feeding in multiple choice tests

Cannaceae

Canna indica

India

8 fed and survived for 27 days, no feeding in multiple choice tests

10 placement of 3 first instars, no survival beyond 3 days

Ceratophyllaceae

Ceratophyllum oryzetorum

China

10 some feeding but unable to complete development

Commelinaceae

Tradescantia fluminensis

India

8 fed and survived for 25 days, eggs laid, no feeding in multiple choice tests

Zebrina pendula

India

8 fed and survived for 33 days, no feeding in multiple choice tests

10 placement of 3 first instars, no survival beyond 3 days

USA

7 0.2 feeding scars/weevil/day vs 13.2 on water hyacinth

Cucurbitaceae

Cucumis sativus

China

3 eggs laid but unable to complete life-cycle (unclear to which weevil species this refers)

8 fed and survived for 38 days, no feeding in multiple choice tests (unclear to which weevil species this refers)

10 some feeding but unable to complete development (unclear to which weevil species this refers)

Hydrocharitaceae

Hydrilla sp.

India

8 slight feeding (scraping of leaf epidermis) and survived for 16 days, no feeding in multiple choice tests

Vallisneria sp.

India

8 fed and survived for 16 days, eggs laid, no feeding in multiple choice tests

Liliaceae

Amaryllis sp.

India

8 fed and survived for 32 days, no feeding in multiple choice tests

10 placement of 3 first instars, no survival beyond 3 days

Musaceae

Musa paradisiaca

India

8 fed and survived for 28 days, no feeding in multiple choice tests

10 placement of 3 first instars, no survival beyond 3 days

Orchidaceae

Vanilla fragrans

India

8 slight feeding (scraping of leaf epidermis) and survived for 34 days, no feeding in multiple choice tests

Pontederiaceae

Eichhornia azurea

USA

7 0.7 feeding scars/weevil/day vs 13.2 on water hyacinth

Monochoria cyanea

Australia

3 eggs laid, 1 larva recovered resulting in 0 adults; vs. 37 larvae recovered from water hyacinth, 24 larvae transferred to new plants resulted in 15 adults

5 average of 8.0 feeding scars vs 1583.0 on water hyacinth

8 average of 33.7 feeding scars/plant after 5 days vs 318 on water hyacinth

Monochoria vaginalis

Australia

3 eggs laid, 1 larva recovered resulting in 0 adults; vs. 37 larvae recovered from water hyacinth, 24 larvae transferred to new plants resulted in 15 adults

5 average of 1.3 feeding scars vs 1583.0 on water hyacinth

8 average of 111.7 feeding scars/plant after 5 days vs 318.0 on water hyacinth

Pontederia cordata

Australia

5 adult feeding and oviposition occurred, larvae unable to complete development

USA

7 10.1 feeding scars/weevil/day vs 13.2 on water hyacinth

10 larval development observed

Sparganiaceae

Sparganium americanum

USA

7 3.1 feeding scars/weevil/day vs 13.2 on water hyacinth

Trapaceae

Trapa bispinosa

India

8 fed and survived for 35 days, eggs laid, no feeding in multiple choice tests