QUEENSLAND HOST RECORDS FOR THE DACINAE (FAM. TRYPETIDAE). SECOND SUPPLEMENTARY LISTS.

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SUMMARY

New host records compiled since 1957 are presented.

Strumeta tryoni (Frogg.), the most important of the economic species in Queensland, has now been bred from 117 hosts.

Records of males of five species attracted to flowers of Orchidaceae and Passifloraceae are given in an Appendix.

INTRODUCTION

Two papers concerned with host records for the Dacinae have been published (May 1953, 1957a). In this paper records compiled since 1957 are presented in the same form—e.g. 2:1:3 (+ 2) denotes 2 commercial, 1 ornamental and 3 wild hosts with 2 further wild host records doubtful or unconfirmed for that species.

Three new records are included for *Strumeta tryoni* (Frogg.), increasing to 117 the number of hosts for this species.

Since the publication of the last host lists, six species of Dacinae have been described and a new species record for Queensland established (May 1957b). No hosts are known for these. Of the 51 species of Dacinae now recorded from Queensland, wild hosts of 16 are still unknown.

Records of males of five species attracted to flowers of Orchidaceae and Passifloraceae Passifloraceae are given in an appendix.

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SECTION 1

Fruit Fly-Host List

AFRODACUS Bezzi

Afrodacus jarvisi (Tryon)

Ornamental Host

Myrtaceae

Psidium cattleianum Sabine—Cherry guava: February. An occasional specimen was bred among large numbers of S. tryoni and S. humeralis.

Wild Host

Myrtaceae

Eugenia suborbicularis Benth.: November. Large numbers emerged from this host in association with S. tryoni and S. kraussi.

(6:1:5 (+ 1))

AUSTRODACUS Perk.

Austrodacus cucumis (French)

Commercial Host

Cucurbitaceae

Trycosanthes anguina L.—Guada bean: February.

Wild Host

Cucurbitaceae

Lagenaria siceraria Standl.—Bottle-gourd: April. Females seen to oviposit in this fruit. Larval development was not established.

(10:0:2 (+ 2))

HETERODACULUS Hardy

Heterodaculus visendus Hardy

Wild Host

Guttiferae

Garcinia gibbsae Sp. Moore—a Native mangosteen: December.

(0:0:3)

Strumeta humeralis (Perk.)

Commercial Hosts

Annonaceae

Annona squamosa L.—Custard apple: April—an occasional specimen among a series of S. tryoni.

Vitaceae

Vitis labruscana L. H. Bail.—Isabella grape: November, Central Oueensland.

Ornamental Host

Myrtaceae

Psidium cattleianum Sabine.—Cherry guava: February. (22:6:20 (+ 1))

Strumeta kraussi Hardy

Wild Hosts

Euphorbiaceae

Fontainea picrosperma C. T. White: January.

Flacourtiaceae

Baileyoxylon lanceolatum C. T. White: February.

Myrtaceae

Eugenia suborbicularis Benth.: November, Coen, North Queensland.

Psidium guajava L.—Guava: April—a very occasional specimen among a large series of A. jarvisi, S. humeralis and S. tryoni.

Rutaceae

Acronychia sp. aff. laevis Forst.: January, North Queensland. This host is very close botanically to Acronychia laevis Forst. of Southern Queensland, a common host of S. halfordiae (Tryon).

Acronychia vestita F. Muell.: October.

(0:2:25)

Strumeta musae (Tryon)

Wild Host

Myrtaceae

Psidium guajava L.—Guava: April, Cairns. An occasional specimen bred among a large series of A. jarvisi, S. humeralis and S. tryoni. An earlier record by Hardy (1951), considered as doubtful (May 1953), is now confirmed.

$$(2(+1):0:2(+1))$$

Strumeta tryoni (Frogg.)

Ornamental Host

Rosaceae

Prunus cerasifera Ehrh. var. pissardii Koehne.—Ornamental plum: November.

Wild Hosts

Rutaceae

Acronychia acidula F. Muell.—Scrub lemon: October—occasional specimens among a series of S. kraussi.

Acronychia sp. aff. laevis Forst.: January, Evelyn Tableland area, North Queensland. In an earlier paper (May 1953, p. 69), Acronychia laevis Forst. was considered a doubtful record for S. tryoni. Acronychia sp. aff. laevis is not readily separated botanically from A. laevis Forst. which was described from Southern Queensland.

(41:11:65(+3))

SECTION 2

Host—Fruit Fly List

Botanical Name	Common Name	Species Recorded	P. com order
	Common Name	Species Recorded	Remarks
ANNONACEAE Annona squamosa L.	Custard apple	Strumeta humeralis	Occasional specimens
CUCURBITACEAE Lagenaria siceraria Standl.	Bottle-gourd	Austrodacus cucumis	Oviposition record
$Trycosanthes\ anguina\ { m L}.$	Guada bean	Austrodacus cucumis	only
EUPHORBIACEAE Fontainea picrosperma C. T. White		Strumeta kraussi	
FLACOURTIACEAE Baileyoxylon lanceolatum C. T. White		Strumeta kraussi	
GUTTIFERAE Garcinia gibbsae Sp. Moore	A Native mangosteen	Heterodaculus visendus	
MYRTACEAE Eugenia suborbicularis Benth.		Afrodacus jarvisi Strumeta kraussi	In large numbers
Psidium cattleianum Sabine	Cherry guava	Afrodacus jarvisi Strumeta humeralis	Occasional specimens Bred in appreciable numbers
Psidium guajava L.	Guava	Strumeta kraussi	An occasional speci- men
		Strumeta musae	A confirmed record
ROSACEAE Prunus cerasifera Ehrh. var. pissardii Koehne	Ornamental plum	Strumeta tryoni	
RUTACEAE Acronychia acidula F. Muell. Acronychia sp. aff.	Scrub lemon	Stumeta tryoni Strumeta kraussi	Occasional specimens
laevis Forst. Acronychia vestita F. Muell.		Strumeta tryoni Strumeta kraussi	
VITACEAE Vitis labruscana L. H. Bail.	Isabella grape	Strumeta humeralis	

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REFERENCES

- HARDY, D. E. (1951).—The Krauss collection of Australian fruit flies (*Tephritidae-Diptera*).

 Pacif. Sci. 5: 115-89.
- MAY, A. W. S. (1953).—Queensland host records for the Dacinae (fam. Trypetidae). Qd J. Agric. Sci. 10: 36-79.
- MAY, A. W. S. (1957a).—Queensland host records for the Dacinae (fam. Trypetidae). First supplementary lists. Qd J. Agric. Sci. 14: 29-39.
- MAY A. W. S. (1957b).—New species and records of Dacinae (*Trypetidae*, *Diptera*) from Queensland and New Guinea. *Qd J. Agric. Sci.* 14: 293-306.

APPENDIX

Flower—Male Fruit Fly List

Records of male Dacinae attracted to flowers are presented below. Three records for *Afrodacus jarvisi* (Tryon) attracted to Anacardiaceae, Orchidaceae and Passifloraceae were published earlier (May 1953).

Botanical Name	Common Name	Species Recorded	Remarks
ORCHIDACEAE Dendrobium superbiens G. Reichb.	Golden orchid	Strumeta breviaculeus Strumeta bryoniae Strumeta pallidus Strumeta tryoni	In large numbers Few specimens only Few specimens only Few specimens only
PASSIFLORACEAE Passiflora maliformis L.	Sweet calabash	Afrodacus jarvisi Strumeta tryoni	In large numbers Occasional specimens