

# HOST RANGES AND INFESTATION INDICES OF FRUIT FLIES (DIPTERA: TEPHRITIDAE) IN MPUMALANGA AND LIMPOPO, SOUTH AFRICA

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Fruit from 40 exotic and 20 indigenous plant species were sampled in Limpopo and Mpumalanga. Fruit were incubated to determine the presence of fruit fly species. *Dacus* spp. were found infesting Cucurbitaceae fruit. *Bactrocera dorsalis* was reared from 19 plant species belonging to 11 families and mango and guava were identified as important hosts. High infestation indices of *Ceratitis capitata* were found in *Coffea* species. *Ceratitis quilicii* and *Ceratitis rosa*, which are two closely related species, were found to share the same host plants. However, *C. rosa* dominated in fruit sampled at the ARC-TSC experimental farm at Mbombela. High infestation indices of *C. rosa* were found in exotic fruit of the family Myrtaceae. Stem fruit (Sapotaceae) was an important indigenous host for *C. quilicii* and *C. rosa*. *Ceratitis cosyra* seemed to have a more restricted host range in comparison to the other economically important *Ceratitis* species.

## Host plants - *Ceratitis cosyra*

Family	Host plant
Anacardiaceae	Marula
Anacardiaceae	Mango
Clusiaceae	African mangosteen
Leguminosae	Wild mango
Myrtaceae	Feijoa
Myrtaceae	Guava
Salicaceae	Kei-apple

## Host plants - *Bactrocera dorsalis*

Family	Host plant
Anacardiaceae	Mango
Anacardiaceae	Marula
Lythraceae	Pomegranate
Malpighiaceae	Acerola
Meliaceae	Cape ash
Myrtaceae	Feijoa
Myrtaceae	Guava
Myrtaceae	Strawberry guava
Myrtaceae	Costa Rican guava
Myrtaceae	Rose apple
Myrtaceae	Wax jambu
Oxalidaceae	Carambola
Rosaceae	Loquat
Rosaceae	Apple
Rutaceae	Sweet orange
Salicaceae	Kei-apple
Salicaceae	Ketembilla
Sapotaceae	Sapodilla
Sapotaceae	Stem fruit

## Host plants - *Ceratitis capitata*

Family	Host plant
Anacardiaceae	Mango
Apocynaceae	Simple-spined num-num
Clusiaceae	African mangosteen
Malpighiaceae	Acerola
Meliaceae	Cape ash
Myrtaceae	Surinam cherry
Myrtaceae	Jaboticaba
Myrtaceae	Strawberry guava
Myrtaceae	Guava
Leguminosae	Wild mango
Oxalidaceae	Carambola
Rhamnaceae	Red ivory
Rhamnaceae	Brown ivory
Rosaceae	Loquat
Rosaceae	Apple
Rubiaceae	Wild coffee
Rubiaceae	Arabica coffee
Rubiaceae	Robusta coffee
Rutaceae	White sapote
Rutaceae	Sweet orange
Rutaceae	Orange jessamine
Salicaceae	Kei-apple
Salicaceae	Natal apricot
Sapotaceae	Milkwood
Sapotaceae	Stem fruit

## Host plants - *Ceratitis quilicii* and *Ceratitis rosa*

Family	Host plant	<i>C. quilicii</i>	<i>C. rosa</i>
Anacardiaceae	Mango	✓	✓
Annonaceae	Wild custard apple	✓	✓
Clusiaceae	African mangosteen	✓	✓
Cucurbitaceae	Wild cucumber	✓	x
Leguminosae	Wild mango	x	✓
Malpighiaceae	Acerola	x	✓
Myrtaceae	Feijoa	✓	✓
Myrtaceae	Jaboticaba	x	✓
Myrtaceae	Strawberry guava	✓	✓
Myrtaceae	Costa Rican guava	✓	✓
Myrtaceae	Guava	✓	✓
Myrtaceae	Rose-apple	✓	✓
Myrtaceae	Water berry	x	✓
Myrtaceae	Wax jumbo	✓	✓
Oxalidaceae	Carambola	x	✓
Rosaceae	Quince	✓	x
Rosaceae	Loquat	✓	✓
Rosaceae	Apple	✓	x
Rosaceae	Pear	✓	x
Rubiaceae	Coffee	✓	x
Rutaceae	White sapote	x	✓
Rutaceae	Sweet orange	x	✓
Salicaceae	Kei-apple	✓	✓
Salicaceae	Ketembilla	✓	✓
Salicaceae	Natal apricot	x	✓
Sapotaceae	Sapodilla	✓	✓
Sapotaceae	Stem fruit	✓	✓