

Table 1. List of varieties tested in Waimanalo trial.

Variety name	Company	Growth type	TSWV	TYLCV	Fruit Type
Kewalo	UH	Determinate	Resistant	Susceptible	Globe
DP Seeds	Mochomo F3	Indeterminate	Tolerant	Tolerant	Roma
DP Seeds	Sacramento	Indeterminate	Susceptible	Tolerant	Globe
DP Seeds	Pamella	Indeterminate	Tolerant	Tolerant	Globe
Hathor F1	Southern Seeds	Indeterminate	Highly Resist.	Highly Resist.	Cherry
Sarina	Genesis Seeds	Indeterminate	Highly Resist.	Highly Resist.	Cherry
72618	Nirit Seeds	Indeterminate	Susceptible	Interm. Resist.	Grape
72103	Nirit Seeds	Indeterminate	Interm. Resist.	Interm. Resist.	Globe
74956	Nirit Seeds	Indeterminate	Interm. Resist.	Interm. Resist.	Roma
Indigo Rose	OSU	Indeterminate	Susceptible	Susceptible	Cherry

Table 2. List of varieties tested in Waialua trial

Variety name	Company	Growth type	TSWV	TYLCV	Fruit Type
Kewalo	UH	Determinate	Resistant	Susceptible	Globe
V3051	Vilmorin Seeds	Indeterminate	Highly Resist.	Interm. Resist.	Roma
Katya	Hazera Seeds	Determinate	Interm. Resist.	Interm. Resist.	Roma
Matty	Hazera Seeds	Determinate	Interm. Resist.	Interm. Resist.	Roma
Shanty	Hazera Seeds	Determinate	Interm. Resist.	Interm. Resist.	Oval/Roma
Inbar	Hazera Seeds	Determinate	Highly Resist.	Interm. Resist.	Beefsteak
Rona	Hazera Seeds	Indeterminate	Highly Resist.	Interm. Resist.	Grape/cherry
Hathor F1	Southern Seeds	Indeterminate	Highly Resist.	Highly Resist.	Cherry
Sarina	Genesis Seeds	Indeterminate	Highly Resist.	Highly Resist.	Cherry
72061	Nirit Seeds	Indeterminate	Interm. Resist.	Interm. Resist.	Globe
75125	Nirit Seeds	Indeterminate	Susceptible	Interm. Resist.	Grape
72618	Nirit Seeds	Indeterminate	Susceptible	Interm. Resist.	Grape
72103	Nirit Seeds	Indeterminate	Interm. Resist.	Interm. Resist.	Globe
74956	Nirit Seeds	Indeterminate	Interm. Resist.	Interm. Resist.	Roma
Indigo Rose	OSU	Indeterminate	Susceptible	Susceptible	Cherry

Insect vectors were not present in the Waimanalo trial, plants were also symptom free. In the Waialua trial, vectors were present and some varieties showed virus symptoms.

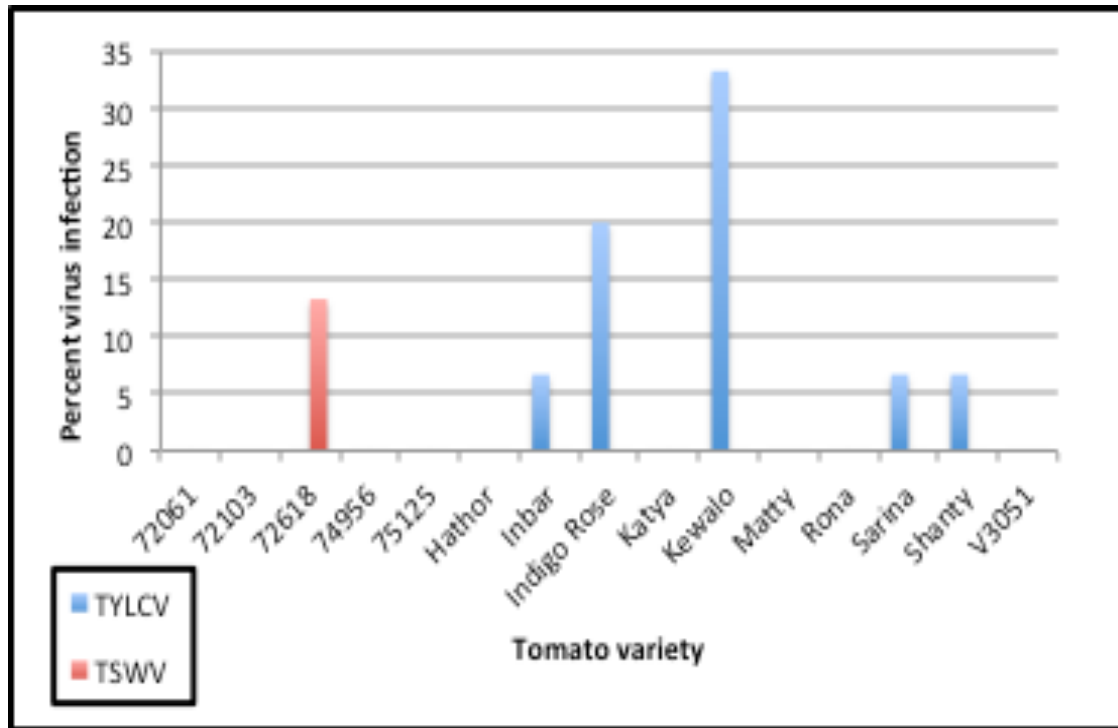


Fig. 1. Percent virus infection of TYLCV & TSWV on tomato varieties

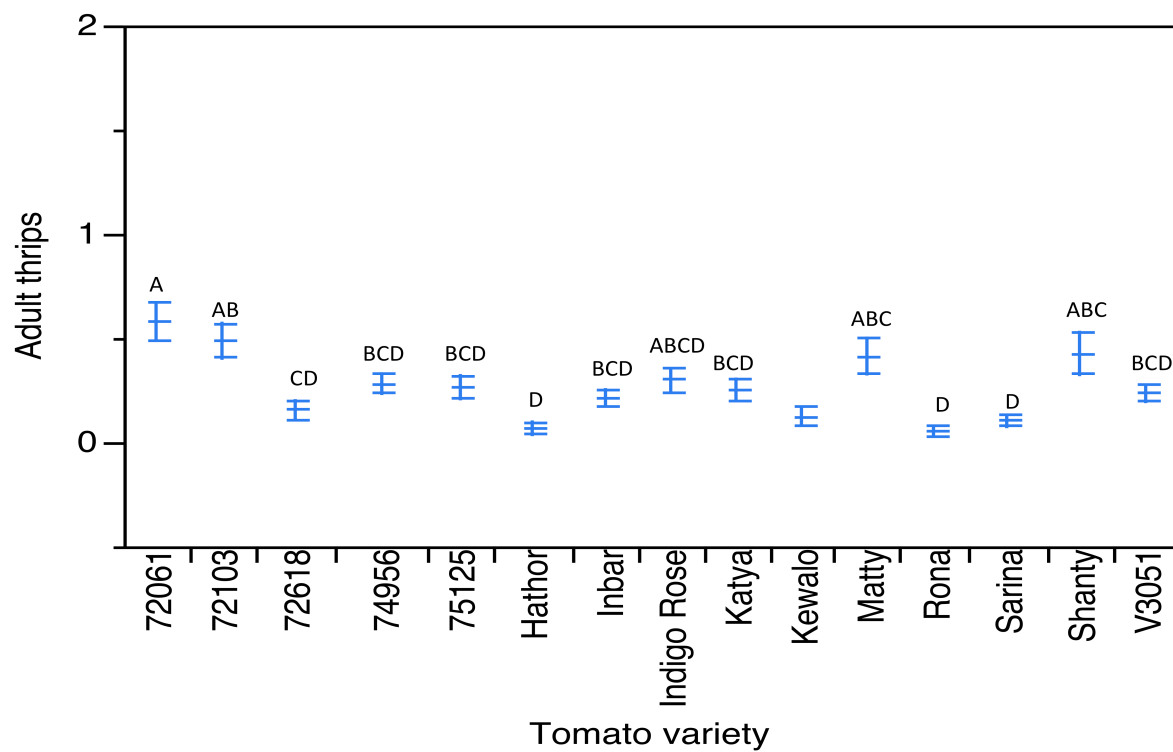


Fig. 2. Mean (±SE) number of adult thrips per flower on different tomato varieties; thrips counts were log-transformed prior to ANOVA, Tukey pairwise comparisons. Waialua trial

- ❖ DAS-ELISA confirmed infection of TYLCV in 5 tomato varieties in the Waialua trial
- ❖ DAS-ELISA confirmed infection of TSWV in 1 tomato variety in the Waialua trial (Fig 1).
- ❖ Significant differences in adult thrips densities were observed between tomato varieties ($F = 7.14$, $P < 0.0001$) (Fig 2, different letters for means indicate significant differences, Tukey test).
- ❖ Significant differences in whitefly nymph densities were observed between tomato varieties ($F = 25.37$, $P < 0.0001$) (Fig 3, different letters for means indicate significant differences, Tukey test).

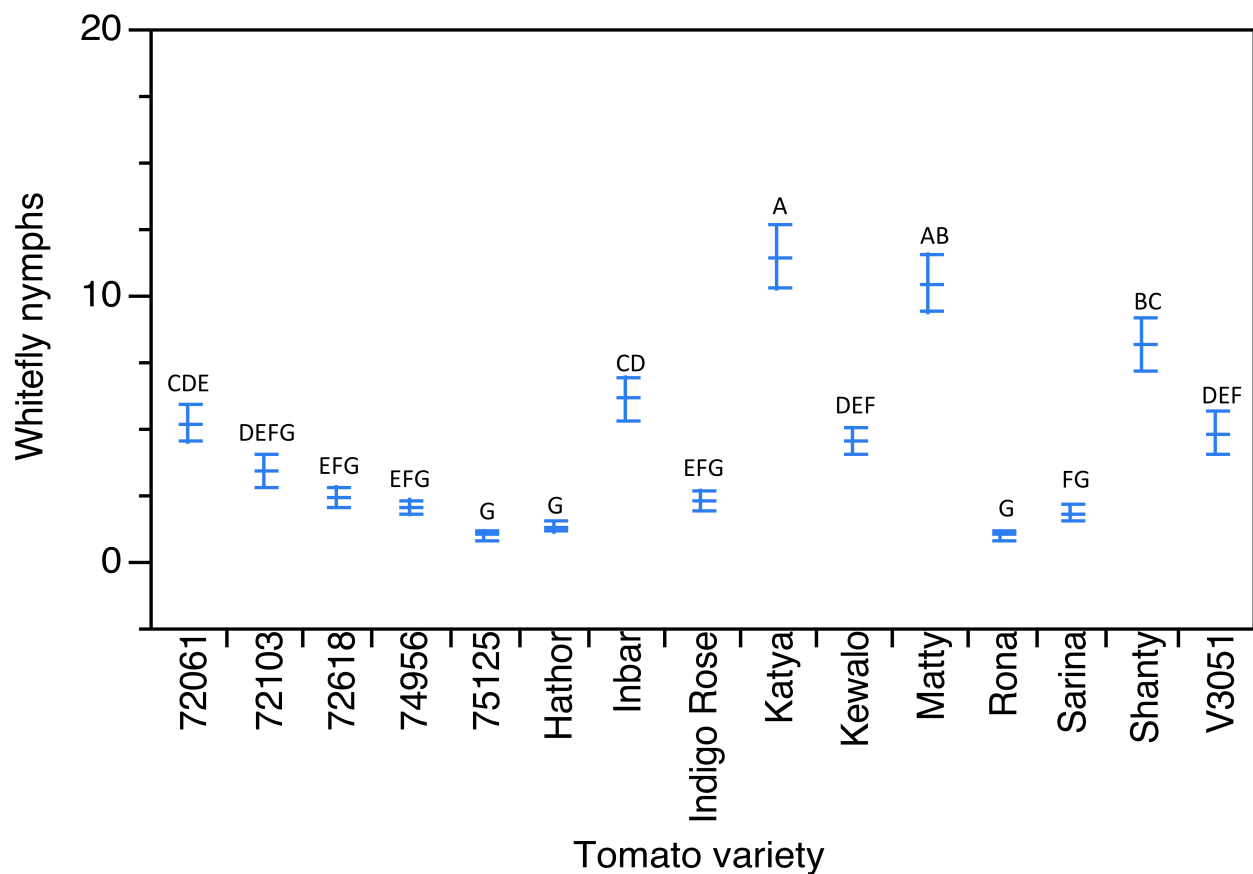


Fig. 3. Mean (\pm SE) number of whitefly nymphs per three terminal leaflets of different tomato varieties – Waialua trial.

