

Evaluation of White rust resistance in 'Waianae-resistant' UH Kai choy variety, Poamoho Station March 2002

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Introduction:

Two susceptible kay choy varieties, one susceptible pak choy variety and one resistant ('Wainae-resistant') kay choy variety will be grown in a randomized complete block experiment at the Poamoho Experiment Station. The field will be set up, so that the resistant variety plots are all surrounded by susceptible varieties.

Experimental Design:

RCB

Treatment: 4 varieties x 5 replications per variety.

Each plot= 10 ft, double row, drip irrigated.

Field size= 50 by 20 feet (1000 sq ft), the experiment will consist of five 50-ft long rows, with four 10-ft plots per row, for a total of 20 plots (4 varieties x 5 replications/variety= 20 plots total). Two border rows of susceptible kay choy varieties will surround the experimental plot, along the length of the field.

Data to be collected:

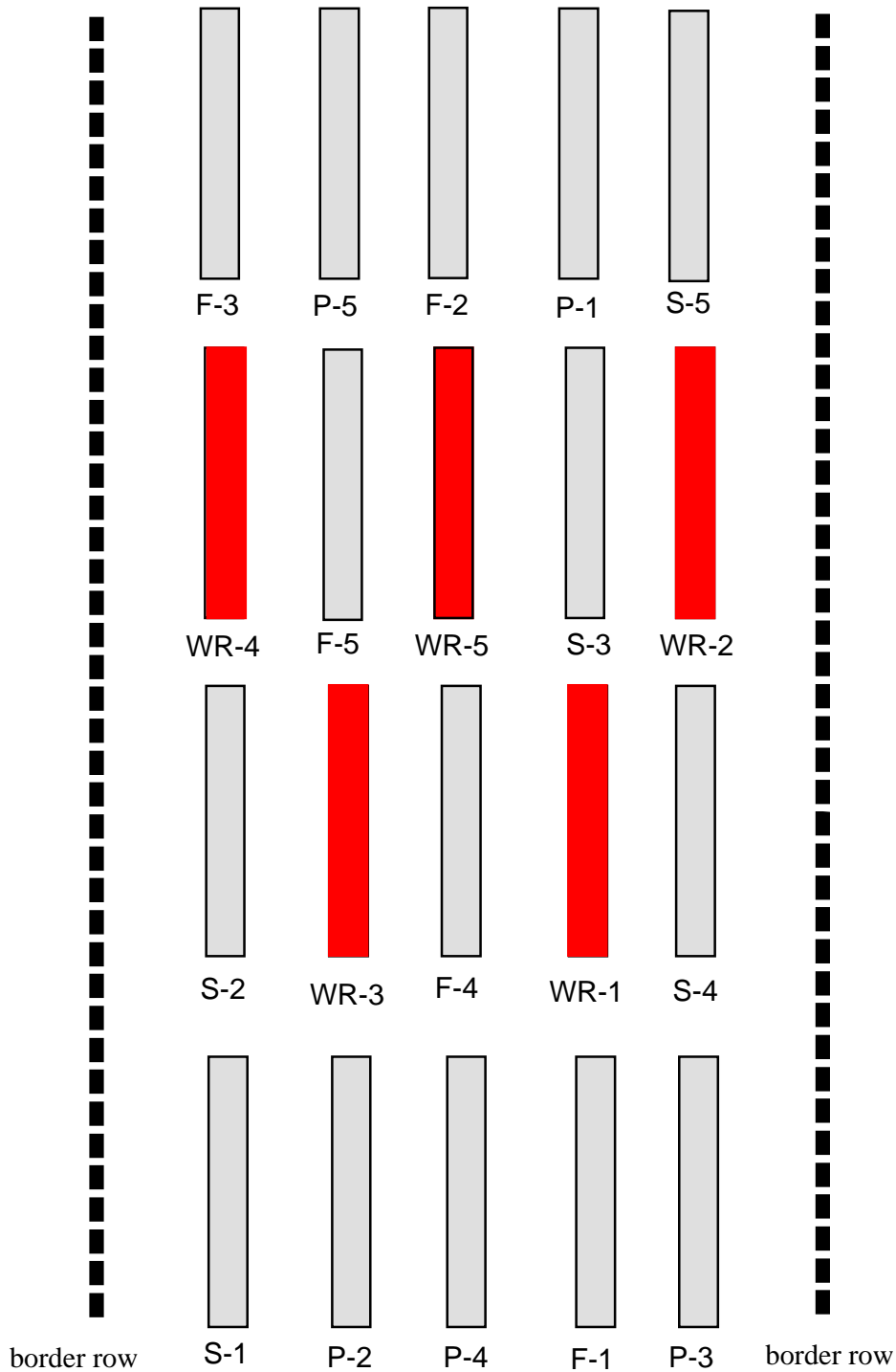
Number of plants per plot (plant stand)

Field disease assessment: Visual index of white rust incidence per plot will be conducted every other week (0= no symptoms, 10= 100% foliar incidence).


Laboratory assessment: 3 most recently matured leaves will be collected per plot (15 total per variety), placed in a cooler (in a plastic bag) and taken to the laboratory for white rust incidence assessment. One quadrant will be inspected per leaf in the laboratory to obtain a count of disease spores per leaf.

Yield: 10 continuous heads of kay choy will be harvested from the center of each row to measure weight, length, core diameter, and to assess their marketability.

Field Diagram
 (50 by 20 ft plot, 3 ft between rows)



Codes: WR= Waianae Resistant, S-Waianae Susceptible, F= Fukuda susceptible, P= Pak choy susceptible; Border Row= Waianae Susceptible Kay Choy

 = susceptible variety