## Section 1 Mites and Sap-Sucking Insects

ANTIBIOTIC RESPONSES OF AZUKI BEAN ACCESSIONS TO THE TWO SPOTTED SPIDER MITE H.G. Aguilar(1), L.K. Tanigoshi(1) and T.A. Lumpkin(2) (1) Department of Entomology, Washington State University Pullman, Washington 99164-6382

(2) Department of Crop Science, Washington State University Pullman, Washington 99164-6420

The two-spotted spider mite, **Tetranychus urticae** Koch (TSSM), is the most important pest of azuki bean, **Vigna angularis**, when cultivated within the irrigated dryland of eastern Washington. Because of the severe damage they produce in this host during the summer, several management tactics are being evaluated. Under lab conditions exotic germplasm accessions are being screened with a leaf-disk technique to select for those accessions which express an antibiotic response to TSSM's ovipositional rate. Seventy nine accessions have been evaluated so far, and the statistical analysis has showed that some cultivars apparently possess plant resistance mechanisms, of which antibiosis is the most easily identified (Table 1).

Azuki bean accession	Source	Mean number eggs/fem/day*
des sc d	10 Sep 15 Se	Freat. and ID at /a
12	China	10.64a
382	Japan	7.91bcdef
193	Korea	2.33uvw
577	Ivory Coast	2.29uvwx
279	Japan	2.20uvwx
480	China	2.15uvwx
524	Japan	2.03uvwxy
531	Japan	1.53vwxy
470	Japan	1.38wxy
514		1.38xy
188	Korea	1.28xy
66	Korea	1.05xy

Table 1. Ovipositional rate of **Tetranychus urticae** Koch (Acari: Tetranychidae) on azuki bean accessions.

\* Means within a column followed by a different letter are significantly different (P<0.05; Duncan's test)