

PROJECT TITLE: The evaluation of dryland chickpea varieties.

PROJECT LEADER: G.F. Stallknecht

PROJECT PERSONNEL: K.M. Gilbertson, SARC; Dr. Fred Muelbauer,
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OBJECTIVES: To evaluate and compare the yield and quality of large
or small seeded chickpeas under dryland cropping.

RESULTS: Yields were excellent ranging from 1555 to 4030 Lb/A.
Seed weights were quite good also. Quality standards for the large
seeded (% remaining on 22 mm screen) chickpeas were very poor.
Possibly due to late maturity and a cool wet finishing season.

SUMMARY: Chickpeas remain a possible viable option on dryland. As
on dry years they can out produce feed barley and even on normal to
wet years compete well. The big drawback is the market potential.
While some brokers claim there is an excellent market, a grower
would be wise to have a contract before growing chickpeas.

FUTURE PLANS: We will continue evaluating chickpeas, and have
expanded evaluation to include other research centers. This data
will be accumulated and discussed in a later report.

TABLE 1. 1993 DRYLAND CHICKPEA NURSERY, SARC, HUNTLEY, MT.

	VARIETY	YIELD LB/AC	PLANTHT INCHES	FLOWER DATE	100 SEED WEIGHT	22 mm SCR
5	ICCX860047BP20H	4030.87	22.33	164.33	18.91	.00
6	SARAH	3605.12	18.67	164.67	17.52	.00
1	CA188220	2842.85	21.67	171.00	41.69	22.27
2	CA188359	1572.28	22.67	171.00	45.18	38.18
4	SURUTATO 77	1557.64	19.67	164.00	47.48	50.15
3	TAMMANY	1555.01	20.33	164.33	44.45	37.16

***** STATISTICAL TABLE *****

EXPERIMENTAL MEANS	2527.30	20.89	166.56	35.87	24.63
TOTAL OBSERVATIONS	18.00	18.00	18.00	18.00	18.00
NO. OF REPLICATIONS	3.00	3.00	3.00	3.00	3.00
NO. OF VARIETIES	6.00	6.00	6.00	6.00	6.00
REP. MEAN SQUARE	*****	1.39	.39	1.43	15.40
VAR. MEAN SQUARE	*****	7.56	35.69	571.95	1326.49
ERROR MEAN SQUARE	*****	2.52	.32	2.14	11.59
ERROR DEGREES OF FREEDOM	10.00	10.00	10.00	10.00	10.00
F TEST FOR REPS.	.72	.55	1.21	.67	1.33
F TEST FOR VAR.	38.49	3.00	110.76	267.51	114.48
STANDARD ERROR	313.88	1.59	.57	1.46	3.40
STANDARD ERROR OF THE MEAN	181.22	.92	.33	.84	1.97
C.V. 1: (S/MEAN)*100	12.42	7.60	.34	4.08	13.82
C.V. 2: (S OF MEAN/MEAN)*100	7.17	4.39	.20	2.35	7.98
LSD (0.05)	571.04	2.89	1.03	2.66	6.19

93CHKPEA.CPD
93CHKPEA.STT

DATE PLANTED: 4/21/93
DATE HARVESTED: 10/01/93