

Table 2. Cystine content in seed albumins of five distant *Pisum* lines. E-total albumin extracts; S1-S4-fractions separated by gel filtration on Sephadex G-100. Values are percentages of the total amino acids estimated.

Pisum line	E	S1	S2	S3	S4
<i>P. sativum</i>	2.01	0.70	0.91	3.93	0.89
<i>P. humile</i>	2.26	0.84	0.67	4.59	0.35
<i>P. cinereum</i>	3.00	0.70	1.14	4.31	0.23
<i>P. abyssinicum</i>	3.67	0.80	0.63	4.75	0.25
<i>P. fulvum</i>	2.46	0.83	0.89	3.38	0.00
Mean	2.68	0.77	0.85	4.19	0.34

- (1) Przybylska, J., S. Blixt, J. Hurich, Z. Zimniak-Przybylska. 1977. *Genetica Polonica* 18:27-38.
- (2) Jakubek, M. and J. Przybylska. 1978. *PNL* 10:24.
- (3) Jakubek, M. and J. Przybylska. 1979. *Genetica Polonica* (in press).
- (4) Hurich, J., H. Parzysz, and J. Przybylska. 1977. *Genetica Polonica* 1b:241-252.

AGRONOMIC PERFORMANCE AND SEED PROTEIN YIELD OF SOME PEA GENOTYPES

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Earlier (PNL 10:25-26, 1978) we reported measurements of height and of several yield components in 25 varieties of peas grown at Kashmir (N.W. Himalaya region of India). Table 1 includes some additional data obtained from the same study. Among the tall types, T56 had the highest shelling percentage, number of seeds per plant, grain yield, and seed protein yield but it had the lowest seed protein content. 'Lincoln' performed second best, combining high grain yield with better seed protein content. In the dwarf group, 'Early Badger' and GC 468 were among the best in the test.

Table 1. Plant performance of pea genotypes (Mean value of 30 x 3 plants per genotype)

Height group	Variety	Shoot height (cm)	Tiller no	Pods plant	Pod size (cm)	Shelling (%)	Seeds/plant	1,000 seed (gm)	Grain yield/plant (gm)	Seed protein (%)	Protein yield/plant (gm)	
A - Tall genotypes	a	Conquette	104.8	3	24	7.2	44	156.0	145.3	22.7	23.5	5.3
		Pusa-vipasha	108.8	3	25	6.1	43	112.5	293.8	33.2	21.9	7.2
	b	Lincoln	128.0	5	26	7.8	46	197.6	232.2	45.9	24.0	11.0
	c	Banarasi-sweet	156.7	2	19	7.9	40	102.6	240.4	24.7	22.7	5.6
		T56	157.5	3	37	7.1	49	251.6	265.0	66.6	19.7	13.1
	d	Early-giant	221.8	3	25	8.7	40	135.0	279.4	37.7	23.1	8.7
	e	Wando *	231.5	4	25	7.3	49	137.5	220.7	30.3	25.9	7.9
	C.D. *	7.32	0.33	3.12	0.49	3.4	8.34	14.55	3.3	1.9		
B - Dwarf genotypes	a	GC 195	41.2	4	17.5	--	--	87.5	250.1	26.7	22.7	6.1
	b	Boasch-selection	59.8	2	15.4	8.1	44	101.6	225.0	25.2	21.1	5.3
		Early-Badger	58.0	6	34.0	7.3	47	244.8	267.7	65.5	22.0	14.4
		GC 468	58.8	2	19.4	7.8	43	170.7	252.3	43.1	19.6	8.4
		Early-December	58.5	1	19.5	--	--	97.5	224.1	28.5	24.5	7.0
		Bonneville	64.3	3	14.6	7.1	44	112.4	240.1	27.0	23.8	6.4
	c	GC 477	64.3	3	14.8	7.9	43	112.5	254.4	28.6	22.4	6.4
		Primette	68.1	4	19.4	--	--	131.9	181.6	24.0	17.9	4.3
	d	IP3	79.8	2	17.2	6.9	48	120.4	232.3	27.8	23.7	6.6
	e	Local dwarf	88.6	2	13.9	6.1	50	83.4	155.1	16.3	19.8	3.2
	C.D. *	3.9	0.31	2.06	0.62	2.14	8.13	17.66	4.6	1.8		

(* critical difference values at 5P level)