

HFP 4, A HIGH YIELDING LEAFLESS STRAIN OF PEA

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Pea 'HFP 4' has been developed from a cross EC 109196 x T 163 made by the second author at Indian Agricultural Research Institute, New Delhi. EC 109196 is a dwarf and leafless strain introduced from U.K., whereas T 163 is a tall, late maturing, powdery mildew susceptible variety released long ago. The comparative performance of new strain HFP compared with T 163 is given in Tables 1 and 2.

Table 1. Plant characters of HFP 4 and T 163.

Variety	Days to 75% bloom	Plant height (cm)	Pods plant (no.)	Seeds pod (no.)	100-seed weight (g)	Powdery mildew incidence (%)
HFP 4	92	42	22	4	21.2	14
T 163	84	105	10	4	17.9	62

Table 2. Seed yield of HFP 4 and T 163 (q/ha).

Variety	1978- 79	1979- 80	1980- 81	1981- 82	1982- 83	1983- 84	1984- 85	Mean	Percent increase over T-163
HFP	28.8	37.7	18.6	18.0	22.6	20.4	17.7	23.4	52.9
T-163	14.8	21.7	10.9	11.3	17.0	16.5	14.2	15.3	-
CD 5%	4.0	3.4	3.4	2.7	2.6	3.6	2.9	-	-
CV	12.6	8.3	16.7	13.4	12.0	16.1	12.4	-	-

Strain HFP 4 is leafless, white flowered, dwarf, and produces large, white, round, and smooth seeds. The stipules are normal with wavy margins. It is fairly tolerant to powdery mildew disease and to leaf miner. Its higher yield over T 163 may result from its larger seed size and larger number of pods per plant. Being dwarf it responds to high fertility and plant population. By virtue of its high yield and tolerance to powdery mildew it has been identified for release in 1985.