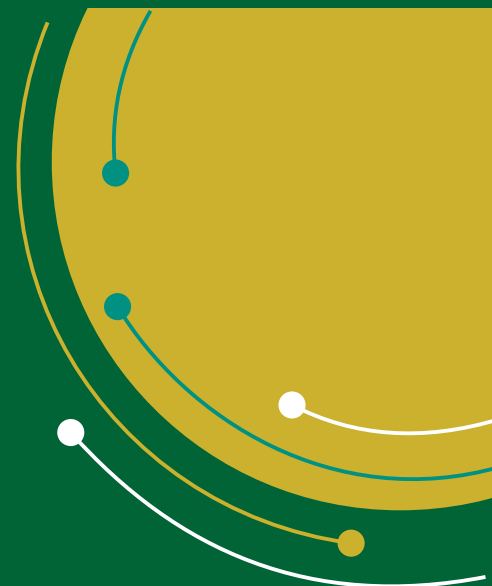



# Brassica Oilseed Developed by Plant Breeding and Genetics, UAF



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Despite a large number of crop options, Pakistan is suffering from acute shortage of edible oil. About 75% of the total foreign exchange reserved for import of food commodities is spent on the import of edible oil. Edible oil of Rs.136.92 billion was imported during 2015-16 which is second to petroleum imports. Demand for edible oil is increasing with an increase in population. With a per capita consumption of 20 Kg/annum, the country requires about 2.667 Million tons of edible oil annually; almost 70% of this is imported and only 30% is domestically produced. Cotton-seed contributes almost 74% of the domestic production and remaining is produced from rapeseed/mustard, sunflower and canola. The Brassicas are important oilseeds contributing a big share in the total edible oil production in Pakistan after cottonseed. Increase in the seed and oil yield of brassicas can bridge the gap between demand and domestic production of edible oil in the country. One of the major causes of low yield of oilseeds in our country is the unavailability of high yielding and early maturing varieties which could fit in our cropping patterns. Development of high yielding varieties of brassicas will enhance the production of oilseeds per unit area, increase the farmer income, bridge the gap between production and consumption of edible oils. Endeavors made to achieve the so set targets in the department of Plant Breeding and Genetics resulted an elite type UAF-11. This is short stature, early maturing and has higher seed oil contents than all the present-day varieties of Brassica oilseeds. It is envisaged that it would enhance the production by increasing the seed yield per acre as well as oil yield per acre since it has around 49% seed oil contents. Therefore, it has the potential to take a room in the cropping pattern of different zones in Pakistan.



UAF-11 has completed physiological maturity whereas other lines are showing yellow flowering in full swing



Plant type of UAF- 11



Plants of UAF-11 showing uniformity



Seeds of UAF-11 (bold and Yellow)

**Table 1. Comparison of UAF-11 with other high yielding Brassica commercial varieties**

Varieties	Days to maturity	Yield/acre	Oil contents %
UAF-11	98	36	46
RAYA ANMOL	122	26	41
LONG SARSON	127	22	38
EXCEL	120	23	34
PUNJAB SARSON	118	24	37
DGL	135	26	36
FAISAL CANOLA	124	19	40
SHIRALEE	130	22	39

UAF-11 is being introduced to the farmers in different parts of the Punjab for its adoption. The previous local evaluations have proved that comparatively UAF-11 is:

- Better yielding: its potential yield is 45 monds per acre
- Better in seed oil contents: its estimated oil contents are 49.1 %
- Has shorter stature: its average plant height is 120 cm
- Has shorter duration: it matures in 55-65 days after emergence and is ready to harvest

