The Chickpea Crop in 1998

A. Vandenberg, G. Araganosa and A.E. Slinkard
Crop Development Centre
University of Saskatchewan
5 1 Campus Drive
Saskatoon, SK S7N 5A8

Establishment of the chickpea crop as a permanent cropping option in Saskatchewan took a major leap forward in 1997. Saskatchewan pulse growers seeded about 25,000 acres in 1998, mostly kabuli types, but a few thousand acres of desi were also grown. The favourable weather for chickpea production was a bonus. The crop thrives in seasons with good early moisture followed by high temperatures and dry conditions. Crop quality was generally very good. Virtually the entire 1997 crop was seeded to three varieties: Sanford (kabuli), Dwelley (kabuli) and Myles (desi). These three varieties are resistant to ascochyta blight *(Ascochyta rabiei).*

The fact that almost no production of susceptible varieties occurred is an excellent example of a successful combined extension effort by Saskatchewan Agriculture and Food, the Saskatchewan Pulse Growers, Agriculture and Agri-Food Canada and the Crop Development Centre at the University of Saskatchewan. After the winter of 1996-97 extension season, the message was received loud and clear by existing and potential chickpea growers: stay away from susceptible varieties.

The 1997 chickpea crop from Saskatchewan attracted attention from pulse buyers in many parts of the world. The global trading network for pulses is well aware of potential new suppliers because the same network participates in the trade of the Canadian pea and lentil crops. A portion of the 1996 and 1997 desi crop was marketed in India and received a favourable reaction. India remains the driving force in world chickpea trade. If India requires 1% supplementation of desi chickpea supply and consumption through imports, Saskatchewan would need to produce almost 100,000 acres to meet the demand. The crop timing for northern temperate production is ideal. Prices peak in India in winter, just before the new crop is harvested there. Saskatchewan production is harvested in the early fall and can be moved into place in bulk shipments in time to meet the demand. Demand for desi chickpea (in some years) has been estimated by some traders at hundreds of thousands of tonnes.

How competitive is western Canada compared to other potential suppliers like Australia? At the recent International Food Legume Research Conference IV, Australian researchers continued to predict that Australia would emerge as the sole supplier of most pulses to India. The Australian pulse industry may be writing us off too soon. Over the next few years, the competitiveness of Canadian production will improve for several reasons. First, we are only just beginning to discover how to grow chickpea crops. The Agri-Food Innovation Fund through the Hub and Spoke Project will determine improved methods for all agronomic factors in production, including better weed control. Second, new varieties with better adaptation and productivity will be developed. Third, rainfall and

climate work in our favour, especially with better adapted varieties. Australian production regions are more prone to drought and more exposed to risk factors because the crop is in the field for a much longer period of time (5-6 months) compared to Canada (3-4 months). Fourth, the freight disadvantage from Canada to India may be overrated when bulk shipping is considered.

Portions of the 1996 and 1997 kabuli crop were marketed domestically but some was sent overseas. As predicted, the pricing and quality of Canadian chickpeas make them an attractive product. In some markets, a preference was expressed for the flavour of Canadian desi chickpeas. Is this real or is this simply the pleasing taste of another supplier in the system? Time will tell. The quality and reliability of supplies from western Canada should make an impact in chickpea markets, much as these factors have increase our ability to export of other pulse crops.

Now that single seed colour sorting machines are available, the quality of Saskatchewan kabuli chickpeas can be matched to market standard even if late-maturing crops have high proportions of green seeds. Canning quality tests of locally grown kabuli chickpeas show that selected lots of Saskatchewan kabuli chickpeas match the highest standards. This has also been noticed in the marketplace. Overseas buyers and positioning themselves to purchase some supply from Canada in 1998. The pattern of development of the chickpea crop in western Canada is strikingly similar to the pattern of development of the lentil crop in the late 1970s – early 1980s and the pea crop in the mid 1980s to early 1990s.

So all signs are positive in 1998. With softening prices for most grains, attention will focus on alternatives like chickpea. The current estimate is for production on 75,000 to 100,000 acres in 1998. Most production will be Sanford kabuli, but the production of Dwelley (larger size kabuli) and Myles desi should also increase substantially. Newer varieties like B-90, CDC Yuma, CDC Xena and CDC Chico will not have a significant impact in 1998.

In the winter of 1997, an agreement was reached between the Crop Development Centre and the Saskatchewan Pulse Growers whereby distribution rights to CDC pulse varieties are given to the SPG in exchange for operational funding of the breeding programs. The breeding program was stabilized by this arrangement, and is now gearing up for an expansion of effort to develop disease resistant chickpea varieties with larger seed size combined with early maturity.

The first locally bred ascochyta resistant kabuli chickpea variety (CDC Yuma) from the CDC was released through this distribution mechanism. In 1997, breeder seed of CDC Yuma chickpea was sent out to 35 or more CSGA-recognized Select growers in Saskatchewan. In 1998, similar numbers of requests were received for CDC Xena, an earlier maturing, higher yielding version of Dwelley. At least 15 requests were received for CDC Chico, a small-seeded kabuli type with potential as a feed. The demand by seed growers for new varieties remains strong, which is a signal that the chickpea crop is here to stay.