The potential of *Brassica juncea*, *B. carinata* and *Sinapis alba* as new oilseed crops in Canada

Gerhard Rakow

Agriculture and Agri-Food Canada, Saskatoon Research Centre, 107 Science Place, Saskatoon, SK, S7N 0X2, Canada

Brassica napus is the dominating canola oilseed species in Canada, occupying more than 95% of the total acreage of about 4.6 million ha. It is best adapted to the moist and cooler production areas of the prairies. However, there is a large area of farmland in the dry, southern prairies that frequently experiences severe drought and heat during the critical period of flowering and pod filling thus significantly reducing crop yields. *Brassica juncea* and *B. carinata*, and particularly *S. alba*, are better heat and drought tolerant than *B. napus*, and are therefore potential oilcrops for the dry prairie. Research in *B. juncea* has resulted in the registration of two canola varieties of *B. juncea*. Zero erucic acid *B. carinata* is available and research is underway to develop low glucosinolate types. Also, canola type *S. alba* germplasm has been developed. This presentation will review the present status of the research towards improved quality lines in these species and the potential for establishing them as new potential oilcrops for semi-arid growing conditions.