

# RATOONING RAPESEED (*B. napus*) EFFECT ON SEED QUALITY AND ACID FIBRE DETERGENT (ADF) UNDER VARYING DATES OF PLANTING

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## ABSTRACT

Three rainfed experiments planted at varying dates from mid-May to mid-June 1990, were conducted at Agriculture Canada Research Station in Saskatoon, Canada with cv. Westar rapeseed (*Brassica napus* L.) to determine the effect of topping at different growth stages, on seed quality and acid detergent fibre (ADF).

The oil content (%) in seed was significantly affected of the topping treatments with topping stages planted on May 11 and 29, 1990, as compared to check plots apart from the treatment where all the secondary branches were removed. The differences in oil content (%) in seed ranged 37.1 to 42.9 for the first, 35.8 to 41.2 for second and 35.2 to 38.7 % for the third planting. However the oil content (%) in seed was reduced as the planting delayed.

Topping under varying date of planting did not show any significant effect on erucic acid (%) and glucosinolates (micromoles/g of seed) whereas forage quality as estimated from acid detergent fibre (ADF) contents were changed in the vegetative materials produced from different topping stages and time. It ranged 9.9 to 27.4%. Lower acid detergent fibre contents were found in forage cut at the pre-bud stage whereas the forage cut at first flower stage gave the highest acid detergent fibre contents from all trials.

## INTRODUCTION

The Brassica oilseeds are now the third most important source of edible vegetable oil in the world (Downey 1990). Many nutritionists view canola as a very good vegetable oil, one of the best on the market. Like soybean, sunflower and corn, canola oil is low in saturated fats and like all vegetable oils, it contains no cholesterol (Younts 1990).

Larsen and Sorensen, 1985 reported that rapeseed has become an important crop in many countries, following the introduction of rapeseed (canola), low in erucic acid and glucosinolates. Older rapeseed varieties had 2 major defects. Firstly, they produced oil