Hybrid, Spring *Brassica napus* with Winter Germplasm Introgression

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**WARF: P98024US**  
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The Wisconsin Alumni Research Foundation (WARF) is seeking commercial partners interested in developing a method for obtaining high-yield hybrid *Brassica napus* that is sufficiently hardy to endure the harsh, winter climates of the northern United States and Canada.

**OVERVIEW**

*Brassica napus*, the most productive oilseed rape (canola) species, can be divided into two main groups: winter lines, which are robust enough to overwinter in Europe and China, and spring lines, which are grown in northern Europe, Canada, and the northern tier of the United States only during the spring and summer. Although winter lines generally produce higher yields, existing winter varieties are not sufficiently hardy to endure the harsh, winter climates of the northern United States and Canada. Thus, these areas typically only grow lower-yield spring lines.

**THE INVENTION**

UW-Madison researchers have developed a method for obtaining high-yield hybrid *Brassica napus* with the growth habit of a spring line. The method involves various crossing schemes to introduce genes from winter lines into spring lines. The resulting progeny that retain the spring-type growth pattern and have suitably high seed yield are selected for further breeding. Eventually, the favorable high yield genes from the winter line are introgressed into the spring line, resulting in high yielding *B. napus* suitable for growing in spring canola production areas.

**APPLICATIONS**

- Canola production

**KEY BENEFITS**

- Increases seed yield of hybrid *B. napus* with a spring-type growth habit
- Introduction of winter line germplasm into spring lines can further enhance hybrid
vigor in crosses between distantly related spring lines

**ADDITIONAL INFORMATION**

**Tech Fields**
Agriculture - Plant varieties

**CONTACT INFORMATION**

For current licensing status, please contact Emily Bauer at emily@warf.org or (608) 262-8638.