Economics of Dryland Winter Canola Production in Eastern Washington and Oregon

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Winter canola provides a rotational option for dryland grain growers in the Inland Northwest. Winter canola is typically planted in late August on summer fallow, and harvested the following year in early July. Since canola is more sensitive than wheat to dry seedbed conditions, producers can switch to winter wheat production if conditions are not favorable for winter canola. Labor for planting and harvesting can be spread out over a longer period if producers are growing both winter wheat and winter canola. Canola has rotational benefits in that it helps clean up grassy weeds, its long taproot penetrates hardpan, and it can break disease cycles. Growers report up to a 20% yield boost in winter wheat following canola/fallow rather than wheat/fallow.

We have developed budgets for winter canola production based on interviews with producers in the lower rainfall regions of eastern Washington and Oregon: 11" rainfall in Adams County; 14" rainfall in Whitman County; 14" rainfall in Lincoln County, and 14" rainfall near Pendleton, OR. Production costs for this crop are similar to those for winter wheat, but yields are more variable and the crop is more difficult to establish. Given the current market price of canola of approximately $9 per cwt, producers' profits ranged from $43 to $115 per acre over variable production costs (costs directly associated with producing the crop, including machinery repairs and labor). Based on conservative yield data, none of the producers in this study were able to cover their total production costs, with losses ranging from $12 to $36 per acre (see Table 1 below for more detail). Total production costs include machinery depreciation, land rent, and taxes. In these budgets we have not included any returns to management or risk although operator labor is included at the rate of $14 per hour for all machine operations, including set-up time.

As crop breeding research and variety trials continue, growers can expect varieties that are better suited to this region. Yield improvements and/or market price increases are needed to make this crop economically competitive with winter wheat in the wheat/fallow areas of eastern Washington and Oregon. However, the crop may still be attractive to producers due to rotational considerations such as yield benefits to wheat production, improved soil tilth, and fewer weed problems, particularly in areas with few cropping alternatives.

Table 1: Returns over Variable and Total Production Costs for Winter Canola Production by Precipitation Zone and Location (canola price = $0.09/lb)

Precipitation Zone/ Yield (lb/acre)	Price ($/cwt)	Yield (cwt/ac)	Variable Production Costs ($/ac)	Returns over Variable Production Costs ($/ac)	Total Production Costs ($/ac)	Returns over Total Production Costs ($/ac)
10" to 11" rainfall, Adams Co. (20 cwt)	$9	20	$112	$68	$192	-$12
14" rainfall, Whitman Co (20 cwt)	$9	20	$137	$43	$216	-$36
14" rainfall, Pendleton OR (25 cwt)	$9	25	$110	$115	$255	-$30
14" rainfall, Lincoln Co (25 cwt)	$9	25	$124	$101	$254	-$29