

Table 6: Crop Removal Rates For N And P₂O₅¹

Crop ²	Example Target Yield ³	Average Nutrient Uptake Rate ⁴		Average Nutrient Removal Rate ⁵	
		N	P ₂ O ₅	N	P ₂ O ₅
Spring Wheat	2.69 t/ha	35.2 kg/t	13.4 kg/t	25.1 kg/t	9.8 kg/t
Winter Wheat	3.36 t/ha	22.5 kg/t	10.2 kg/t	17.4 kg/t	8.5 kg/t
Barley	4.30 t/ha	29.0 kg/t	11.7 kg/t	20.3 kg/t	8.8 kg/t
Oats	3.81 t/ha	31.5 kg/t	12.1 kg/t	18.3 kg/t	7.7 kg/t
Rye	3.45 t/ha	29.9 kg/t	15.0 kg/t	19.0 kg/t	8.1 kg/t
Grain Corn	6.27 t/ha	27.4 kg/t	11.3 kg/t	17.4 kg/t	7.9 kg/t
Canola	1.96 t/ha	63.9 kg/t	29.5 kg/t	38.7 kg/t	20.8 kg/t
Flax	1.50 t/ha	52.0 kg/t	14.8 kg/t	38.1 kg/t	11.6 kg/t
Sunflowers	1.68 t/ha	49.8 kg/t	17.0 kg/t	35.7 kg/t	10.7 kg/t
Alfalfa	11.2 t/ha	N/A ⁶	N/A	29.0 kg/t	6.9 kg/t
Grass	6.7 t/ha	N/A	N/A	17.1 kg/t	5.0 kg/t
Corn Silage	11.2 t/ha	N/A	N/A	15.6 kg/t	6.4 kg/t
Barley Silage	10.1 t/ha	N/A	N/A	17.2 kg/t	5.9 kg/t

¹ Adapted from Nutrient Uptake and Removal by Field Crops, Western Canada, 2001. Compiled by the Canadian Fertilizer Institute.

² As bushel weights can vary considerably among some crop varieties, values other than those presented here may need to be chosen to better reflect a given cropping scenario.

³ Example target yields for Manitoba. Site specific and actual yields for any parcel of land will depend on the agricultural capability of the land, climate and the producer's management practices.

⁴ Total nutrient taken up by the crop

⁵ Nutrient removed in the harvested portion of the crop

⁶ Not applicable