Agronomic response of field pea to preceding crop, tillage strategy and phosphorus fertilization in Southern Manitoba

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Field pea (Pisium sativum) cultivation in Manitoba, dating back to 1908, reached its peak in 1998 at over 260,000 acres. Recent years have witnessed a resurgence, driven by initiatives like Protein Industries Canada and the growing global pea protein market. Despite this, management practices lack standardization. This study focuses on three key aspects: crop sequence, residue management, and phosphorus (P) fertilizer use and placement. Comparing tilled versus direct-seed wheat or canola stubble, with variations in P application, the research aims to establish best practices. Hypotheses include the potential benefits of wheat preceding peas, the possible advantage of direct seeding, and the impact of starter P applications. Addressing gaps in local knowledge, this research seeks to optimize field pea production in Manitoba, contributing to sustainable and efficient agricultural practices.