Adaptive but static: Seed yield responses of creeping red fescue (*Festuca rubra* L. ssp. *rubra*) to environmental and management factors in the Peace River region of western Canada

The Peace River region covering about 230,000 square kilometers around 55° north latitude and 119° west longitude is the northwestern agricultural frontier of Canada. The cropping environment is typified by long photoperiods during short growing season and predominance of acidic luvisolic soils with poorly developed profile. This region has evolved to be one of the major pockets of seed production of forages and turf-grasses which are exported to 34 countries with major proportion destined to the USA, China, Netherlands, Germany, Poland, Denmark and Argentina. Creeping red fescue seed constitutes major bulk of export with primary use as turf-grass for lawns and golf courses in the temperate regions. Despite being one of the pioneer crops in the region, relatively few publications exist about yield constraints analysis and optimal crop management practices. The knowledge and technology gaps are manifested by the stagnation in seed yield of the crop. This presentation synthesizes the results of studies on creeping red fescue in the Peace River region. Relevant information will also be excerpted from studies about the temperate forage seed crops to identify potential agronomic options and knowledge gaps for enhancing the seed yield of creeping red fescue.
Recent Publications


Biography

Nityananda Khanal is a Forage Research Scientist at Agriculture and Agri-Food Canada. He has his expertise in the agronomy of forage, field and horticultural crops with diverse work experience from tropical to temperate region, from subsistence-oriented to mechanized industrial production systems from Canada, Thailand and Nepal. His current research focuses on developing crop management practices for enhancing seed yield and quality of forage seed crops and designing cropping systems with a rational integration of perennial forage seed and annual food crops.

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