Production of High Quality Fenugreek (Trigonella foenum-graecum L.)


This volume is an excellent piece of original research work on the annual forage legume crop fenugreek (Trigonella foenum-graecum L.). This is the first report of major breeding and agronomic studies on the crop studied in the Canadian prairies of western Canada. This much needed volume provides comprehensive coverage of this new Canadian crop and provides excellent first hand information on the following aspects: crop geography, acclimatization, different germplasms, breeding aspects specifically on the areas of mutation breeding, crop agronomy, field characteristics, fertilizer applications, harvesting approaches, crop pathology, potential pests and pathogens of this crop in the great northern plains, and its future potential to develop into a niche market as a forage and nutraceutical crop in the near future. An additional delight has been comprehensive coverage of the medicinal properties of fenugreek, global distribution, major producing countries, different species of the crop, agronomic practices reported from across the world, and its increasing value as a nutraceutical crop.

The authors represent a team of multi-disciplinary researchers who have been working extensively on different aspects of this crop in the Canadian prairies and are part of an international network of researchers (FenuNet) involved in fenugreek development. The valuable recommendations and suggestions provided regarding the cultivation and agronomic practices of fenugreek under prairie conditions that have less than 100 frost free days is quite fascinating to read. The authors deserve credit for extensive coverage of the crop development within a limited number of pages. Their extensive study involves screening a large number of fenugreek germplasms under both rain-fed (dry land) and irrigated conditions. The authors have also conducted elaborate multi-location trials across western Canada and under distinct biomes representing both the Pacific Northwest and eastern United States.

This volume provides distinct coverage of the soil types, agro-climatic conditions, and germplasms necessary for high forage and seed yielding fenugreek suitable for different locations in western Canada. The authors provide in depth details of their mutation breeding approach followed in developing indeterminate varieties suitable for western Canadian agro-climatic and agro-ecological conditions. Both ethyl methane sulphonate (EMS) and colchicine are recommended for improvement of the crop under greenhouse and field conditions. The authors have also provided comprehensive coverage of the agronomic needs of the crop under prairie conditions and developed an agronomic package for growers. Appropriate rates of different agrochemicals (fertilizer, pesticides, fungicides, gibberelic acid, and nutritional foliar sprays) for the crop have been covered in detail. Fenugreek being a new crop in the Canadian prairies is not expected to have significant pests and pathogens currently. However, it is quite interesting to note that the authors took the pain of doing both detailed fungal and potential insect pest analyses of the crop under prairie conditions. The authors finally conclude and suggest that fenugreek is a dryland preferring, annual forage crop ideal for the rain-fed conditions of western Canada. Another interesting aspect of the volume has been the simple approach, detailed explanation of complicated technical agricultural research findings in simple terms, and a fluent language style. In addition to the simplistic language style, the fabulous collection of

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