

# ForageMonster 101M

Canadian Forage Pearl Millet (CFPM101) | **Rapid Growth** | **Multi-Cut Variety**

- Ultra-high biomass yield even in drought-prone, non-irrigated conditions
- Profuse tillering and early maturing even in sandy loam soils which are low infertility and pH
- Controls root-lesion nematodes, protects against erosion
- Excellent for grazing, green chop, or as silage for dairy, beef, sheep, hogs, and horses

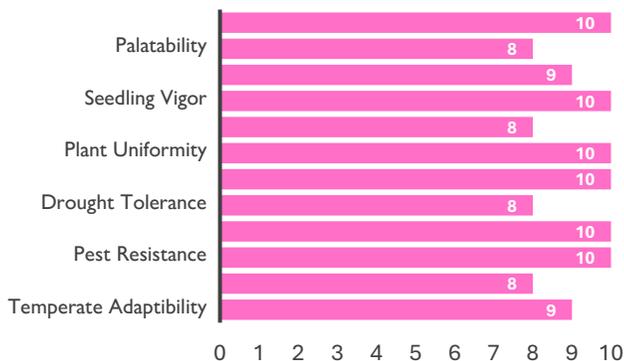
## SNAPSHOT

**Name (ID)** ForageMonster 101M (CFPM101)

**Type** Pearl Millet (Gray to Yellow)

**Development Period** 12 years

**Initial Release** 2002

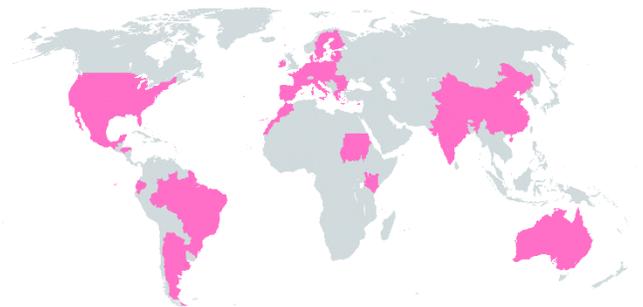


## CROP USE



**ForageMonster 101M** stands out as an exceptionally versatile crop, offering significant advantages to farmers. Its superior drought tolerance and control over root lesion nematodes ensure resilience and sustainability in varied climates. Research shows that ForageMonster 101M rotation not only boosts potato yields but also reduces non-marketable tubers, significantly enhancing farm profitability. Furthermore, it provides nutrient-rich forage, bolstering livestock health and nutrition. By enriching the soil with organic matter, ForageMonster 101M also promotes improved soil fertility and structure, aligning with sustainable farming practices.

## AREAS OF ADAPTATION



ForageMonster 101M is grown across Canada as rotation crop to control root lesion nematode in potato, tobacco, and other vegetable crops. It has been extensively tested in the USA, China, Vietnam, Malaysia, Sudan, Honduras, and UAE.

## FIELD POSITIONING

Tough Dryland	HS
High Yield Dryland	S
Limited Irrigation	S
Full Irrigation	S
Early Planting/Cold Soils*	S
No-Till	HS
Poorly Drained Soils	HS
Anthracnose Prone Area	HS
Fusarium Prone Area	HS

Observed Suitability and Field-by-Field Positioning

HS = Highly Suitable S = Suitable MA = Manage Appropriately X = Poor Suitability

\*Soil temperature should be at least 12°C Celsius

## CHARACTERISTICS AND RATINGS

- **Plant Height (Main Stem)** 100 to 120 cm (first cut)
- **Number of Leaves** 9 to 12
- **Leaf Length** 60 to 80 cm
- **Leaf Width** 4 to 6 cm
- **Leaf Color** Leaf mid-rib, color green
- **Stalk Width** 1 to 2 cm
- **Number of Tillers** 5 to 6 (first cut), 6 to 8 (second cut)
- **Days to First Cut:** 45 to 50
- **Inflorescence** Compact
- **Seed Color** Gray to Yellowish (Non-lustrous)
- **1000 Seed Weight** 9 to 10 g
- **Synchrony of Flowering** Uniform
- **Grain Covering by Glumes** Yes
- **Grain Form/Maturity** 30 days
- **Lodging** No lodging

## CROP MANAGEMENT GUIDE

### KEY USECASES AND FEATURES:

- Forage dry matter yield of 6 to 10 t/ha with crude protein range from 15 to 19%. Utilized for grazing, green chop, hay, pasture, or silage pearl millet makes excellent feed for beef cattle, dairy cows, sheep, goat, hogs, and horses and
- Control of root lesion nematodes in potato and tobacco
- Protect soil from wind erosion when used as a cover crop
- Captures snow over the winter in sandy soils to enhance moisture conditions in spring. Does not over-winter.
- At high density suppresses weeds, decreasing the weed pressure in the subsequent crop
- Enhances commercial potato yields, with a 10% reduction in non-marketable tubers
- Performs well on acidic soils low in fertility and helps in building soil organic matter
- Rapid growth cycles - first cutting would be ready in about 45 to 60 days after planting, and second and third cuts are ready as early as 25 to 30 days thereafter
- No prussic acid and other toxic components

### SEEDING:

- **Planting:** Plant in a well-prepared seedbed when soil temperatures exceed 12°C (54°F) consistently, with no risk of frost, even overnight. In light soils use a cultipacker prior to planting to create a flat, even seedbed **CRITICAL**
- **Spacing:** Rows 7.5 inches apart with seeds planted 2 to 3 inches apart within the row **CRITICAL**
- **Seed Size:** 110,000 seeds/kg
- **Seed Rate:** 4 kg/acre or 10 kg/ha **CRITICAL**
- **Planting Depth:** 0.5 inches **CRITICAL**
- **Planting Equipment:** Use a grain drill, grass seeder, or a no-till drill to plant seed **CRITICAL**
- **Packing:** Press seed into the ground with a press wheel. Do not pack the ground with a heavy land packer after planting the seeds. **CRITICAL**
- **Re seeding:** Direct seed the new crop into the residues

- ForageMonster 101M is not recommended for use in heavy clay soils **CRITICAL**

### FERTILITY:

- **Preparation:** A soil test is always recommended to establish a baseline of fertility requirements
- **Fertilizer Application:** Fertilize according to soil fertility. Apply 50 to 60 lbs/acre Nitrogen and all of the required Phosphorus and Potassium fertilizer right at planting. After first cut apply 50 to 60 lbs/acre of active Nitrogen. The second Nitrogen application is critical for re-growth and crude protein levels
- **Soil pH:** Optimal pH range is 4.5 to 6.0
- **Establishment:** Normally emerges 4 to 8 days after planting. When the plant is 6" tall, it should have 3 to 4 tillers to be considered established
- **Weed Control:** It is important to work the land prior to planting to control early weeds. This mechanical weed control gives pearl millet the opportunity to grow faster than weeds. Aggressive nature of forage pearl millet at high density naturally suppresses weeds

### HARVEST:

- **Green Chop:** The crop attains a height of 100 to 120 cm in about 45 to 50 days. Harvest around this stage, cutting to 15 to 20 cm stubble to allow optimum regrowth
- **Grazing:** Let cattle graze to 15 to 20 cm stubble, then rotate. Plan staggered plantings for continuous grazing at optimal heights. Keep stubble at 20 to 30 cm, allowing 45 cm regrowth before re-grazing. Practice rotational grazing
- **Hay:** Harvest at 60 to 75 cm height, checking the weather to avoid rain for the next 3 to 4 days. Requires sunny weather for drying
- **Silage:** Suitable for silage, harvest after ear head formation, adhering to local guidelines
- Apply nitrogen after each harvest for healthy regrowth

<sup>1</sup>Ratings are based on testing over a number of years in numerous locations. Adverse environmental conditions and planting dates may alter a hybrid's performance, maturity and resistance to certain diseases and insects.

# ForageMonster 101M

## 5-YEAR PERFORMANCE AVERAGES ACROSS CANADA

### VIGOR

Early Vigor	Regeneration Vigor
1.5	3

### TILLERING

Tillers on First Cut	Tillers on Second Cut
3.8	9.5

### PLANT HEIGHT

Height on First Cut (cm)	Height on Second Cut (cm)	Height on Third Cut (cm)
120	85	90

### MOISTURE

Moisture % on First Cut	Moisture % on Second Cut	Moisture % on Third Cut
74.4	73.3	74.9

### GREEN FORAGE YIELD

Total GFY mt/ha Season
51.54

### DRY MATTER YIELD

mt/ha on First Cut	mt/ha on Second Cut	mt/ha on Third Cut	Total DMY mt/ha Season
4.79	4.41	4.20	13.40

### NUTRITIONAL CONTENT (% OF DMY)

Total Digestible Nutrients	Crude Protein	Acid Detergent Fiber	In-vitro Digestibility
57.60	17.50	28.17	84.32
Phosphorus	Calcium	Potassium	
0.550	1.060	2.618	

Early Vigor Rating Scale: 1 = Excellent, 2 = Very Good, 3=Good, 4 = Acceptable, 5 = Poor | Fat measurements are for OMEGA-3.