2005 FORAGE GUIDE

TO

VARIETY & MIXTURE SELECTION

New Nouveau Brunswick CANADA

Agriculture, Fisheries and Aquaculture | Agriculture, Pêches et Aquaculture

RECOMMENDED FORAGE LEGUMES

ALFALFA	Reaction to* Verticillium Wilt	Yield (% of AC Caribou)	Winter Hardiness	Seed Supplier Listing #
AC Brador	HR	100%	Very Good	4
AC Caribou	R	100	Very Good	4
AC Viva	HR	96	Good	4
Abby	R	100	Very Good	11
Algonquin	S	100	Very Good	Public
Apica	S	103	Very Good	4
Arrow	R	98	Good	12
Centurion	R	97	Good	4
OAC Minto	S	100	Good	1, 2
Oneida VR	HR	97	Good	14
Ultra	R	98	Good	4, 7
53Q60	R	100	Very Good	13

YIELD OF AC CARIBOU IN ATLANTIC TRIALS WAS 8.22 t/ha

*HR=Highly Resistant (more than 50% resistant plants), R=Resistant (31-50% resistant plants), MR=Moderately Resistant (15-30% resistant plants), S=Susceptible (less than 15% resistant plants).

RED CLOVER	Approximate Flowering Date	Yield % of Marino (1st Year)	(2nd Year)	Winter Hardiness	Seed Supplier Listing #
AC Christie	June 16	103	92	Very Good	1,4
AC Endure	June 20	104	100	Very Good	4
Dolina	June 23	113	96	Very Good	4, 16
Kvarta	June 23	99	109	Very Good	10
Marino	June 23	100	100	Good	Public
Tempus	June 23	112	116	Very Good	12
AC Charlie	June 25	103	97	Very Good	1

YIELD OF MARINO 1st YEAR AFTER SEEDING 8.7 t/ha; 2nd YEAR AFTER SEEDING 7.0 t/ha

BIRDSFOOT TREFOIL	Approximate Flowering Date	Yield (% of Leo)	Winter Hardiness	Seed Supplier Listing #
AC Langille	June 25	109	Very Good	4
Upstart	June 25	104	Good	10
Bull	June 25	103	Very Good	12
Léo	June 25	100	Good	Public

YIELD OF LEO IN ATLANTIC TRIALS WAS 6.45 t/ha

WHITE CLOVER	Approximate Flowering Date	Regrowth	Winter Hardiness	Seed Supplier Listing #
Milkanova	June 26	Excellent	Very Good	4,10
California (Ladino)	June 26	Good	Good	Public
Sonja	June 26	Excellent	Very Good	1, 4, 6,10

RECOMMENDED FORAGE GRASSES

REED CANARYGRASS	Maturity	Yield (% of Palaton)	Seed Supplier Listing #
Palaton	Very Early	100	4,6,15
Venture	Very Early	101	1,4,14,15,17

YIELD OF PALATON IN ATLANTIC TRIALS WAS 9.4 t/ha

RECOMMENDED FORAGE GRASSES

TIMOTHY	Heading Date*	YIELD (% of Champ) Cut 1	Cut 2	Seed Supplier Listing #
Richmond	June 25	105	100	10, 12
Champ	June 27	100	100	Public
AC Alliance	June 28	104	94	10
Colt	June 30	106	96	18
Apex	July 1	108	82	1
Climax	July 1	107	78	Public
Itasca	July 4	109	105	4
Drummond	July 8	110	67	4, 10
Farol	July 10	103	67	1, 4, 6,10

YIELD OF CHAMP IN ATLANTIC TRIALS WAS 6.45 t/ha (1st cut) and 2.63 t/ha (2nd cut).* Average of 4 Maritime sites.

GRAZING TIMOTHY	Heading Date*	YIELD (% of Farol) Cut 1	Cut 2	Seed Supplier Listing #
Comtal	July 10	101	96	12

YIELD OF FAROL IN ATLANTIC TRIALS WAS 6.64 t/ha (1st cut) and 1.76 t/ha (2nd cut) * Average of 4 Maritime sites.

GRAZING KENTUCKY BLUEGRASS	Approx. Maturity Rating	Tolerance to Variable Drainage	Yield (% of Lato)	Seed Supplier Listing #
Lato	Early	Good	100	12

YIELD OF LATO IN ATLANTIC TRIALS WAS 7.2 t/ha

BROMEGRASS	Approximate Maturity Rating	Tolerance to Variable Drainage	Regrowth Vigor*	Yield (% of Radisson)	Seed Supplier Listing #
SMOOTH					
Bravo	Early	Good	1.7	105	10, 12
Radisson	Early	Good	2.0	100	4
Rebound	Early - Medium	Good	2.0	100	19
MEADOW					
Paddock	Very Early	Moderate	4.3	104	4, 12

*Regrowth Vigor = index of forage regrowth (1=lowest; 5=highest) YIELD OF RADISSON IN TRIALS WAS 7.5 t/ha

ORCHARDGRASS	Approximate Maturity Rating	Tolerance to Variable Drainage	Yield (% of Kay)	Seed Supplier Listing #
AC Nordic	Medium	Fair	98	1, 2, 4, 17
Arctic	Medium - Late	Fair	99	4, 6, 14
Dactus	Early	Fair	101	3
Kay	Early	Fair	100	4, 6, 10

YIELD OF KAY IN ATLANTIC TRIALS WAS 8.4 t/ha

MEADOW FESCUE			Yield (% of Mimer)	
Bartura	Early	Good	102	1
Epic	Early - Medium	Good	103	1, 2, 4, 17
Mimer	Early - Medium	Good	100	4, 6, 10,14
Sigmund	Early - Medium	Good	103	15

YIELD OF MIMER IN ATLANTIC TRIALS WAS 8.5 t/ha

PERENNIAL RYEGRASS			Yield (% of Bastion)	
Bastion	Medium - Late	Fair	100	1,4, 6, 10

YIELD OF BASTION IN ATLANTIC TRIALS WAS 7.5 t/ha

TALL FESCUE HYBRIDS	Approximate Maturity Rating	Tolerance to Variable Drainage	Tillering index*	Yield (% of Johnstone)	Seed Supplier Listing #
Courtenay	Medium	Good	2.5	110	4, 6, 14
Festorina	Medium	Good	4.5	102	3, 4, 6, 10
Johnstone	Early - Medium	Good	3.8	100	1, 3, 14, 17

* Tillering Index -= amount of tillering potential or leafiness (1 = least; 5 = most) JOHNSTONE YIELD WAS 8.7 t/h

ANNUAL RYEGRASS	Type	Yield (% of Lemtal)	Seed Supplier Listing #
Ajax	Tetraploid Italian	108	10, 12
Aubade	Tetraploid Westerwolds	114	1, 4, 6, 8, 15, 17
Barextra	Tetraploid Italian	104	1
Barmultra	Tetraploid Italian	102	1
Barspectra	Tetraploid Westerwolds	104	1
Bartolini	Diploid Italian	99	1
Brocar	Tetraploid Italian	109	19
Fabio	Diploid Italian	114	4, 11
Lemtal	Diploid Italiane	100	1, 4, 6, 17
Maris Ledger	Tetraploid Italian	104	4, 6, 10
Max	Tetraploid Italian	110	12
Sabroso	Tetraploid Westerwolds	115	1
SW Botrus	Tetraploid Westerwolds	110	9

YIELD OF LEMTAL IN ATLANTIC TRIALS WAS 6.75 t/ha

ATLANTIC SEED SUPPLIERS

Listing #	COMPANY	Contact	Phone #	Fax #
1	**Bishop Seeds**	Matt Taylor	1 800 411-2062	613 968-8617
2	**Brett-Young**	Wayne Unger	204 261-7932	204 275-7333
3	**Canco Enterprises**	Alfred Batke	604 556-7292	604 556-7292
4	**Co-op Atlantique**	Rafael Gonzalez	506 858-6356	506 858-6470
6	**Halifax Seed Co.**	Tim Tregunno	902 455-4364	902 455-5271
7	**Hyland Seeds**	Ivan Warriner	519 676-8146	519 676-5674
8	**Labon Inc.**	Sébastien Labonté	450 641-1050	450 641-4979
9	**McCardle Bros.**	Leonard McCardle	902 887-2338	902 887-3132
10	**Mapleseed**	Larry Gilman	1 800 461-7645	705 324-1803
11	**Parsons Seeds Ltd.**	Robert Thom	905 729-2202	905 729-2623
12	**Pickseed Canada Inc.**	Paul Wight	1 800 661-4769	705 878-9249
13	**Pioneer Hi-Bred Ltd.**	Jim Lamb	902 538-3623	902 538-8284
14	**Quality Seeds Ltd.**	Ari Ekstein	1 877 856-7333	905 856-7509
15	**Seed Link**	Peter Bonis	705 324-0544	705 324-2550
16	**Semican**	Jacques Beauchesne	819 362-8823	819-362-3385
17	**Speare Seeds**	Bob Dippel	519 338-3840	519 338-2510
18	**Syngenta Seeds Can. Inc.**	Denis Naud	1-800 756-7333	1-888-717-7122
19	**Westend Seeds Ltd.**	Max VanCingel	506-455-9000	506-455-9000

FORAGE MIXTURES TO CONSIDER FOR YOUR FARM

Recommended Perennial Pasture Mixtures

These mixtures are designed with careful consideration to the specific attributes of each species. Close attention must be paid to fertility levels, stocking rates, rotational grazing practices and fall cutting management, if the following mixtures are to remain productive.

A. Moderately Well Drained to Variable Soils

Mixture	Rate	Comments
10% White Clover 30% Orchardgrass 60% Meadow Fescue	22 kg/ha	Good dual purpose mixture for early cut silage and rotational grazing. Meadow fescue helps give a better bottom to the pasture, producing a tighter sod more 60% more resistant to poaching (punching).
10% White Clover 40% Orchardgrass 50% Perennial Ryegrass	22 kg/ha	Palatable mixture, but must be managed well, if under utilized will become stemmy. Both perennial ryegrass and orchardgrass lack winter hardiness, plant only where appropriate.
10% White Clover 30% Timothy 60% Meadow Fescue	20 kg/ha	Timothy, though less productive than orchardgrass, is more winter hardy, especially on imperfectly drained soils. Some timothy cultivars are more productive under grazing trials than others (e.g. Comtal timothy).

Recommended Haylage Mixtures

A. Loamy Soils with good surface and internal drainage

Mixture	Rate	Comments
80% Alfalfa 20% Timothy	15 kg/ha	This high yielding, high quality mixture is suited to well drained soils with a minimum pH of 6. Having a grass in the mix improves dry down and reduces frost heaving.
60% Alfalfa 40% Orchardgrass	17 kg/ha	Orchardgrass is less compatible with alfalfa than timothy, but has superior regrowth and is better suited to a three cut system. Harvest early to maximize quality.
55% Alfalfa 45% Bromegrass	20 kg/ha	This mixture should be used on well drained fields and with an early alfalfa. Bromegrass is very compatible with alfalfa. Timothy works well with this mixture.

B. Variable to Imperfectly Drained Soils – Heavy Soils Mixtures

Mixture	Rate	Comments
30% Alfalfa 40% Bromegrass 30% Timothy	18 kg/ha	Use on fields containing soils with variable drainage, e.g. formed dykeland. This mixture does well in an aggressive 2-3 cut system, starting with an early June harvest.
60% Red Clover 40% Timothy	12 kg/ha	Best suited for short rotations. Contains a high percentage of red clover in the first two production years as the red clover thins out, both yield and quality decline.
30% Red Clover 10% Ladino Clover 40% Timothy 20% Meadow Fescue	20 kg/ha	The addition of ladino clover and meadow fescue improves the reliability and the longevity of this mixture, but can become too competitive on timothy.

Recommended Hay Mixtures

A. Moderate to Well Drained Soils

Mixture	Rate	Comments
65% Alfalfa 35% Timothy	15 kg/ha	Although alfalfa is not as difficult to wilt as red clover, a hay drier will allow baling at 35% a higher moisture improving leaf retention.
50% Alfalfa 50% Bromegrass	20 kg/ha	Select an early alfalfa. Bromegrass is very compatable with alfalfa and can be superior 50% to timothy in quality and regrowth.
70% Orchardgrass 30% Timothy	14 kg/ha	Three cuts are possible. Heads out in late May/early June; therefore, plan to use first growth for pasture or haylage. Use very early timothy cultivars.
70% Bromegrass 30% Timothy	18 kg/ha	This mixture is well adapted to deeper droughty soils.Due to early maturity, plan to take first cut as haylage. Use early timothy cultivars.

B. Poor and Imperfectly Drained Soils

Mixture	Rate	Comments
85% Timothy 15% Red Clover	13 kg/ha	Red clover is difficult to field cure. A hay drier will reduce heating in storage. Red clover is a short lived perennial which usually doesn't produce longer than three years. Avoid excessive red clover in mixtures.
Timothy	10 kg/ha	Consider just timothy for farms without hay driers and/or in coastal areas that have difficult drying conditions. Select cultivars with varying maturities to spread out harvest.
65% Reed Canarygrass 35% Timothy	14 kg/ha	Low alkaloid varieties of Canarygrass can be used on poorly drained fields which are subjected to periodic flooding. Quality and palatability drop rapidly following heading.
65% Birdsfoot Trefoil 35% Timothy	12 kg/ha	Trefoil is difficult to get established properly. Trefoil can handle lower fertility situations ,but needs 50% bloom before harvest. Trefoil will not persist under frequent cutting.

Suggested changes for the 2006 Forage Guide should be sent to the Editor, Forage Guide, AgraPoint, 10 Webster St., Mailbox 204, Kentville, N.S. B4N lH7 by July 1st, 2005. Forage Guide recommendations are a result of cultivar evaluation trials and research done in the Atlantic Region. Contributions were made by Crops & Livestock Research Center, Agric. & Agri-Food Canada (Charlottetown) plus N.S.A.C., AgraPoint, SCIANS (NS Soil & Crop), N.B.D.A.F.A., P.E.I.D.A. & F. and N.B. Soil & Crop Improvement Association.