### PROGRESS REPORT

# FORAGE CROP INVESTIGATIONS

1958

FORAGE CROP PRODUCTION



Field Husbandry Department Ontario Agricultural College Guelph

#### CO-OPERATIVE BIRDSFOOT TREFOIL HAY-PASTURE TRIALS

Purpose and Procedure: see 1957 report.

Results 1958:

#### 1. Winterhardiness and stands.

In Lincoln county the whole test was rated as poor upon establishment. In Lambton, Durham and Carleton counties the stands of Viking were rated as good and appeared to be the same whether timothy or bromegrass was included in the mixture. When Vernal alfalfa was added to the mixture the stands of Viking were lower in each of these tests. In Durham county it was observed that Vernal was not productive in the low spots of the field or in the dead furrows and Viking was colonizing these areas. Lasalle had disappeared from the stands in Lambton county and was very poor in Durham county. Lasalle was still productive in Carleton county.

#### 2. Characteristics.

Viking appeared more vigorous when seeded alone than when combined with timothy or bromegrass. The vigor of Viking when in mixtures with Vernal alfalfa was equivalent to that when it was combined with timothy or bromegrass.

#### 3. Yield and botanical composition.

Yields were not reported. Estimated yields indicated that there was little difference in production between the mixtures where Viking and Lasalle were included with Vernal alfalfa and timothy. Viking-Climax mixture produced more hay than did Lasalle-Climax at the Durham county location but not in Carleton county. Yields from Viking in mixtures with Climax or Canadian bromegrass were not different. The weed population when Viking was seeded alone was high.

YIELD AND BOTANICAL COMPOSITION OF VIKING BIRDSFOOT TREFOIL IN MIXTURES IN ONTARIO DURING 1958

County	Date	Lasalle + Climax			Viking + Climax			Viking		Viking + Can. Brome			Vernal + Viking +   Climax				Vernal + Lasalle + Climax			
	1958	Yield	% Co R.C.		Yield	% Co B.T.		Yield	% B.T.	Yield	% Con B.T.	mp. Brome	Yield		B.T.	Tim.	Yield		% Com	p. Tim.
Lambton	6/10	-	0	95	-	5	90		90		40	60	-	35	5	60	1	50	T	50
Durham	6/17	0.25	Т	95	1.50	45	55	1.50	90	1.50	40	60	1.75	35	35	30	1.50	55	5	45
Carleton	6/24	2.00)	25	75	1.75	10	90	1.00	75	1.75	10	90	1.75	20	5	75	2.25)	50	Т	50
Average		1.12	8	85	1.62	20	78	1.25	85	1.62	30	63	1.75	30	15	55	1.87	51	2	48

l) estimated yield

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## CHARACTERISTICS OF VIKING BIRDSFOOT TREFOIL IN MIXTURES IN ONTARIO 1958

		WITH	CLIMAX	WITH (		AIA	ONE	1	TH L-CLIMAX	WITH LASALLE		
County	Date 1958	stand* (B.T.)	Vigor*	Stand* (B.T.)	Vigor*	Stand* (B.T.)	Vigor*	Stand* (B.T.)	Vigor*	Stand* (B.T.)	Vigor*	
Lambton	6/10	7	8	7	9	8	10	6	8	0	-	
Lincoln	6/18	1	-	2	-	1	-	1	_	1	-	
I urham	6/17	8	7	8	8	8	7	5	7	1	8	
(arleton	6/24	9	6	9	6	9	7	7	7	6	8	
Iverage		6.2	7.0	6.5	7.6	6.5	8.0	4.8	7.3	2.6	8.0	

<sup>\*</sup> Scale 1 - poor; 10 - excellent.