

Forage legumes / Legumineuses fourrageres

Crop/Culture: Alfalfa

Location/ Emplacement: Saskatchewan

Title/Titre: Occurrence of Alfalfa mosaic virus on alfalfa in Saskatchewan, 1990.

**Name and Agency/
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METHODS: Samples were collected from 61 alfalfa fields in central Saskatchewan in September, 1990. Samples were collected in a tear-drop pattern, with a single alfalfa stem sampled at each 4-m interval. Thirty stems per field were collected and stored on ice, then frozen. Alfalfa mosaic virus (AMV) symptoms are not distinctive in the fall, and there was no attempt to select plants with symptoms. ELISA, using the monoclonal antibody PVAS-92 from the American Type Culture Collection, was used to examine a 2 gm sample of bulked material from each site.

RESULTS & COMMENTS: There were large differences in the incidence of AMV among locations (Table 1). In the Melfort and Saskatoon regions, only 2 of 30 fields were positive for AMV, while 19 of 31 fields near Outlook and North Battleford were positive for the virus. The reason for this difference is not apparent. There were substantial differences in virus incidence between the irrigated and dryland sites at Outlook, but similar differences was not observed at the other locations. In 1991, samples were collected from the same fields, together with agronomic information and cropping history, but testing of these samples is not complete.

Table 1. Presence or absence (incidence) of AMV in alfalfa fields in four regions of central Saskatchewan, 1990.

Location	No. sites	No. with AMV	Incidence (%)
Melfort			
- dryland	14	1	6%
Saskatoon			
- dryland	6	0	0%
- irrigated	10	1	10%
North Battleford			
- dryland	13	2	61%
- irrigated	3	2	67%
Outlook			
- dryland	4	1	25%
- irrigated	11	8	73%

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