infested with black root rot (S.K.G.). In Kings Co., N.S. lt. infection caused root tips to rot off (C.L.L.). Roots contained in 399 samples of tobacco soil examined in Ontario were rated for black root rot as follows: no disease in 32 samples, trace in 128, light in 132, mod. in 58, sev. in 40, and very sev. in 9 (H.A.O.).

MOSAIC (tobacco mosaic virus). Overall losses in Ont. to TMV were negligible. Ten acres on an Oxford Co. farm were severely infected; this was attributed to a heavy infestation of horse nettles (Solanum carolinense L.) which were infected and acted as the source of the virus (S.K.G.).

OTHER VIRUS DISEASES. Ringspot, cucumber mosaic and etch virus were observed in the flue-cured tobacco crop in Ont. but their incidence was negligible (S.K.G.).

CHEMICAL INJURY. There were a few reports in Ontario of individual heavy losses due to improper application of agricultural chemicals either in the greenhouse or the field (S.K.G.).

WEATHER FLECK (atmospheric pollution) was more sev. in Ont. than in 1966. Favorable conditions for fleck were apparently prevalent at the susceptible stage of the tobacco plants (S.K.G.).

E. Cultivated and Other Grasses

AGROPYRON - Wheatgrass

HEAD SMUT (Ustilago bullata) was observed frequently on A. trachycaulum s. of Winnipeg, Man. (J.J.N.). At Saskatoon, Sask. in a replicate test of introductions of A. trachycaulum, head smut was observed on lines 1710 from the Kustaraj region of the U.S.S.R. (OT1270-70) with 1% infection and 1708 from Godollo, Hungary (1963), which had slightly less than 1% infection. The other lines tested, mostly from Canada, failed to show infection (J.D.S.).

BROMUS - Bromegrass

LEAF BLOTCH (Drechslera bromi) caused tr.-mod. damage in 4/4 fields examined in C. Alta. (B.B.).

SEEDLING BLIGHT (Podosphaeriella verticillata). In a seed sample of northern common brome (S-6610), obtained from the Unity district of Sask., 2% of the seeds surface-sterilized with 70% alcohol developed stromatic coremia and spores (J.D.S.).

LEAF SPOT (Pyrenophora bromi, Selenophoma [Sacc.] Sprague and Johnson, and Rhynchosporium secalis [Oud.] J.J. Davis). See article in C.P.D.S. 47(4):112-115, 1967 (J.D.S.). Moderate infection of Bromus inermis by P. bromi was observed in 68/98 fields examined in the Peace River area Alta. and 54/82 fields in Sask. (J.D.S.). Infection of B. inermis by S. bromigena was mod. at Champion, S. Alta. (G.A.N.); tr.-mod. in 2/2 fields in C. Alta. and mod. in 61/98 fields at the Peace River, Alta. (J.D.S.).

SCALD (Rhynchosporium secalis) caused sl. damage in 13/82 fields examined in Sask. and in 16/98 in Alta. See article in C.P.D.S. 47(4):112-115, 1967 (J.D.S.).

WHITEHEAD (?Thrips, Fusarium spp.). A tr. of damage was observed in 2/2 fields examined in C. Alta. (B.B.).

CALAMAGROSTIS - Bluejoint grass

ERGOT (Claviceps purpurea) occurred on C. canadensis at Rocky Mtn. House, Alta. (A.W.H.).

STRIPE SMUT (Ustilago striiformis). A tr. was observed at "The Narrows," Man. (J.J.N.).

ELYMUS - Wild rye

ERGOT (Claviceps purpurea) occurred on E. innovatus at Rocky Mtn. House, Alta. (A.W.H.).

LEAF SPOT (Pyrenophora tritici-repentis) on E. innovatus caused sl.-mod. damage at Sandy Lake and other wooded areas west of Piprell Lake, Sask. (J.D.S.).

FESTUCA - Fescue

SNOW MOLD. Low temperature basidiomycete caused mod. damage in the Edmonton, Alta. area (A.W.H.).

STEM EYESPOT. In July 1967 a stem eyespot was found in two fields of creeping red fescue (F. rubra L.) near Beaverlodge, Alta. A fungus was found associated with lesions on stems, sheaths, and inflorescences, but no spores or sporophores were detected (J.D.S.).

PHALARIS - Canarygrass

LEAF SPOT (Stagonospora foliicola) was observed in 1 field of P. arundinaceae at Sandy Lake near Candle Lake, Sask. Damage was sl. (J.D.S.).

PHLEUM - Timothy

LEAF SPOT (Heterosporium phlei) on P. pratense caused a tr. of damage in 6/9 fields examined in C. Alta. (B.B.). In the Nipawin/Tisdale area of Sask. 28/28 fields examined showed mod.-sev. damage. Second and

3rd crops of the 'Climax' cultivar were more severely affected than the 1st and 4th. A 1st seed crop of the 'Bounty' cultivar was about 10% infected. Seed yield 'estimated for Sask. for 1967 indicate a 50% reduction in yield per acre in comparison with the 1966 crops. Abundant straw from the heavy 1966 crop provided substrate for overwintering of the leaf spot fungus. In some cases, the death of large patches of plants in 1967 could be related to localized smothering from heavy litter. On parts of one field where heavy straw had been burned after the 1966 harvest, the stand of plants was greatly reduced: the burning of litter had not controlled the leaf spot (J.D.S.).

LAWNS AND TURF

SNOW MOLD (low temperature basidiomycete). In 20 turf areas examined in Lethbridge, Calgary, and Edmonton, Alta. damage was rated as 8–tr. 4–mod. 8–sev. (J.B.L., J.E.M.).

MELTING OUT (Drechslera poae) caused some damage to lawn grass at Daysland, Alta. (A.W.H.).

POWDERY MILDEW (Erysiphe graminis) occurred on lawns at Edmonton, Alta. (A.W.H.).

PINK SNOW MOLD (Fusarium nivale). Damage to lawns in the Lethbridge, Alta., area was rated 2–tr. 2–mod. 1–sev./5 examined. Kentucky bluegrass (Poa ratensis L. 'Merion') and creeping bent (Agrostis palustris Huds. 'Penncross') were affected (See CPDS 48:130–131. 1968) were affected. F. nivale caused heavy damage to Poa annua fairways at a golf course near Montreal, Que., where 85% of the damage was attributed to pink snow mold and 15% to gray snow mold incited by Typhula sp. (H.S.T.). Damage was also reported from Copetown, Ont. (H.S.T.).

LEAF SPOT (Leptosphaerulina australis), Curvularia lunata). These 2 weak parasites, identified by Dr. K.A. Shoemaker (DAOM No. 116550), caused browning in the turf of a bowling green at Kamloops, B.C. (H.S.P.).

FAIRY RINGS (Marasmius oreades) were observed at Lethbridge, Alta. Damage was rated 6–tr. 8–sl. 6–mod./20 areas examined (P.E.B.).

GRAY SNOW MOLD (Typhula spp.). Sl. damage to 3 lawns at Fredericton, N.B., was attributed to T. itoana (S.R.C.). In the Montreal, Que., area gray snow mold caused severe injury to 'Penncross' bent (Agrostis palustris Huds.) and comprised part of the snow mold complex on Poa annua (See PINK SNOW MOLD) (H.S.T.). Typhula was also reported on turfgrass at Copetown and Cooksville, Ont. (H.S.T.).

WINTER KILLING. Damage was rated 2–mod. 2–sev./30 areas examined at Lethbridge, Calgary and Edmonton, Alta. (J.B.L., J.E.F.).