

4. **Second-Year Fumigation.**—In this test with fumigation repeated, Iscobrome D was substituted for Iscobrome. Second-year fumigation produced significant increases in yield, ranging from 284 to 421 pounds per acre, but significant reduction in burn. Yield and grade were both higher but burn was lower than in Test 3, where fumigation was not repeated.

5. **Choice of Fumigant.**—Fumigation gave highly significant increases in yield, ranging from 176 to 253 pounds per acre, and slight reduction in burn, which was significant only with D-D. About the first of May the plants in the D-D and Dowfume N plots were smaller in size and darker in color than those in the Dowfume W-10 and Iscobrome D plots, and yields were slightly lower.

1948

The second month of the season was dry. Burn was poor but yield and grade were good, especially on Area D, which was irrigated.

6. **Choice of Fumigant.**—The second year of this test showed significantly reduced yield and burn for Dowfume N. All other burn tests were slightly below that of the check. Dowfume W-40 and Soilfume 60-40 increased yield slightly.

7. **Date of Fumigation.**—The three dates of application were September 29, December 3 and February 5. The September application was followed by a cover crop of oats. Highest yield was obtained with D-D applied in September, followed by Dowfume W-40 applied in September and December. All burn tests except one were slightly below the check.

1949

The season was dry from the latter part of April to the first of June and generally less favorable than the preceding three. Yield, grade and burn were all rather low.

8. **Rate of Fumigation.**—This test was conducted on area A, which had been planted in 1948 in crops other than tobacco and not fumigated. All treatments increased the yield 79 pounds or more except the 43-gallon rate of D-D, which gave a decrease. Burn was reduced with each increment in amount of fumigant applied, especially so with D-D.

9. **Fourth-Year Fumigation.**—The plots in area B had been fumigated in 1948, but were planted in crops other than tobacco.