Tall fescue (*Festuca arundinacea*) is naturally infected with *Neotyphodium coenophialum* (Fig. 1), a fungal endophyte that causes “fescue toxicosis” in ruminants and horses (5). Fescue toxicosis includes many symptoms, such as reduced dry matter intake, poor weight gain, low blood prolactin, high body temperatures, high rectal temperatures, low conception rate, and vasoconstriction. Toxins responsible for fescue toxicosis are now known to be ergot alkaloids, a class of compounds produced by the fungal endophyte (2).

When endophyte-infected (E+) tall fescue hay is ammoniated (treated with 3% anhydrous ammonia), livestock show little or no symptoms of fescue toxicosis. In one study, lambs consuming ammoniated E+ tall fescue hay had improved dry matter intake, higher daily gain, and increased concentrations of the hormone prolactin compared to lambs fed untreated E+ tall fescue hay (1). Although ammoniation increased fiber digestibility, the improved lamb performance was probably due to lower toxicity rather than increased nutrition; evidence of such was seen in prolactin levels, and because ammoniation did not improve lamb performance when hay was endophyte-free, even though it increased digestibility and rate of passage (1).

In contrast to ammoniation, ensiling does not appear to eliminate symptoms of fescue toxicosis. In one study, infected tall fescue was clipped in the autumn, ensiled, then fed to dairy calves; the calves exhibited low blood prolactin and high rectal temperatures (3).

There has been no experiment to compare the effects of harvesting and storing methods on ergot alkaloid concentration in E+ tall fescue. Yet such a study may prove that certain harvesting and storing methods can detoxify E+ tall fescue by directly decreasing ergot alkaloid concentration, while other methods may preserve toxins until feeding time. This experiment was conducted to determine if ergot alkaloid concentration in toxic tall fescue would be affected when forage was green chopped, ensiled, and cured as hay with and without ammoniation.