Techniques of alfalfa management explained

By JOYCE BUTT
Staff Correspondent

BAIR – With top-quality alfalfa hay selling at prices well over the hundred dollar mark per ton, farmers are taking a second look at the popular forage as a cash crop.

Informing growers of the latest techniques in alfalfa management and pest control was one of the purposes of the January 3 York-Adams Alfalfa and Small Grains meeting, held at the York County 4-H Center.

Penn State forage specialist, Dr. John Baylor, emphasized the importance of establishing good stands of alfalfa through the use of certified seed, liming and fertilizing according to soil tests. To maintain yield persistence over several years, the control of weeds, he stressed that insects and diseases must be carefully managed.

Dr. Baylor, as well as others on the program, noted that it is critical to avoid harvesting alfalfa stands from late August through late September. During that period, the plant is preparing the buds and rihzomes that will determine the following year's crop, as well as feed the plant through the winter dormancy stage. Studies at the University have shown that plants not distrubed during that early fall feed storage period develop larger numbers of longer and heavier buds.

In reviewing the most common disease threats to alfalfa stands, Dr. Baylor noted that bacterial wilt, once a serious problem with the forage crop, has been brought under control through improved genetic varieties carrying an imbred resistance to the wilt.

Anthracnose, a fungus infestation, becomes a problem when weather becomes hot and humid, usually about the second or third cutting stage. The disease will attack new seedlings and is characterized by dark lesions on the plant stems, straw colored stalks, and drooping necks.

Also known as Wet Foot Disease, Phytophthora Root Rot is another fungus most often seen on heavy wet soils. A blackened and rotted root system and yellowed, stunted plants are symptoms of the fungus.

Another alfalfa problem is caused by Fusarium Rott Rot, termed by Dr. Baylor as "old age disease." Most frequently seen on stands at least two to three years old, the bacteria enters the plant through physical damage to the above ground stalks, such as breakage from equipment passing over the plants.

Varieties of alfalfa seed that are anthracnose resistant, while giving good yields and stand persistence, include Saranac AR, Arc, WL311, Conestoga, Olympic and Vanguard, sometimes called Victor. Two varieties, Apollo and WL 318, have a resistance to Phytophthora, but not to anthracnose.

Dr. Baylor spoke during the afternoon session on using preservatives in forage harvesting factors that affect the quality.

According to studies, an alfalfa/grass mixture results in a better-quality feed than either red clover/grass or timothy. Proper handling of the forage is important, with Dr. Baylor stressing that no artificial drying or preservative technique can make top grade hay from old, toughened fibrous material.

Research by Penn State has shown that the chemicals are best added by nozzle at the throat of the baler, sprayed on the hay as it begins to move through the machine, for the most practical mixing through the mass.

Experimentally preserved hays were fed through ewes and received higher acceptance than did the field-cured forages. Acid threated hays compared favorably with heat-treated in quality, and dry matter losses were reduced. The acid-treatment method also resulted in about a quarter-ton greater yield recovery per acre. Dr. Baylor warned that acid treated hay does lose some color after treatment, indicating the loss of carotene from the forage. Distribution of the chemical is critical, and uniform windrows are a must for the method's best performance.

Extension agents John Swartz, Adams County, and John Smith, York County, hosts for the meeting, gave recommendations on controlling insects on alfalfa.

Stressing management as the key to alfalfa production, Smith warned growers that pesticides should not be used as a crutch, but as a carefully timed tool.

Potato leaf hopper is the insect causing the most problems in area fields, according to the agriculture agents.

The hoppers sting the plants, infecting them with a stunting virus. Once the insect has attacked, sprays are of no use, so early control of infestations is the only answer.

One recommended way to examine the alfalfa stands is through the use of a sweep net. One leaf hopper per sweep in established fields and one per two sweeps in newly-planted acreage is an indication to apply sprays. Critical insect buildup time is mid-June to early July.

Swartz noted that new stands should be carefully protected, with sprays applied at four to six inches of growth. While some new varieties of alfalfa will hold their color when infected with the virus, they still lose TDN, protein and height.

New 1978 ASCS cost sharing practices were announced, and special emphasis on vegetative cover crops. Approximately 80 per cent of the cost of lime, seed and fertilizer will be shared for establishing new cover crops that will remain for a five-year life span, plus the year of planting. Cost sharing on improvement of cover areas is also 80 per cent of the charges for lime and fertilizer on areas retained in the cover planting for five years.

Entomology winners named

HARRISBURG – Sylvia Royer of Lebanon R4, captured the championship in first-year 4-H entomology classes at the 62nd Farm Show.

Winner for second-year members was Kevin Shope of Duncansville, Blair County. Third-year winner was Julie Bower of Danville, Montour County. Nancy Mays of 1212 Nissley Road, Lancaster, captured the title for fourth-year members.

Potato honors recorded

HARRISBURG – Two Lehigh County potato exhibitors made their marks at the 62nd annual Pennsylvania State Farm Show last week.

Timothy Geiger, Schnecksville R1, won the championship in the 4-H division with the Superior variety. And, Charles Koenig, New Tripoli R1, exhibited the heaviest potato for 1978.