

FORAGE CHALLENGES AND OPPORTUNITIES IN THE NINETIES

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Many new opportunities, as well as challenges, await us in the coming decade. New and improved forages will be available. New methods of forage conservation as hay or silage are being developed. New ideas and improvements in pasture management techniques will be available. One of the challenges of the nineties will be for the rancher to find ways to efficiently incorporate new technology into his or her ranching operation. First, let us consider some of the opportunities in the way of new forage crops that will be available.

Certified seed of the new Tifton 9 Pensacola Bahiagrass will be on the market this fall, that is assuming there is favorable weather for a good seed harvest this summer. The seed supply will be somewhat limited this first year, but will increase in the future as additional certified seed fields are planted. In plot tests, Tifton 9 Pensacola bahiagrass has produced 30 to 40 percent higher yields than the old Pensacola. Much of this yield increase has come in the first and last harvests of the growing season. This indicates better distribution of forage which is an additional advantage for Florida ranchers. The plant breeding program from which Tifton 9 was developed, continues today. New cultivars with even greater yielding ability than that of Tifton 9 are expected in the future. Two new stargrasses, Florico and Florona, were released last year. Both cultivars are an improvement over the older cultivar, Ona. These grasses are adapted to south-central Florida and planting material is available from the experiment station at Ona.

Work is progressing on the development of new elephantgrasses and crosses of elephantgrass with pearl millet. These grasses are expected not only to be highly productive but also to be a step up in quality compared to other perennial grasses. A new ryegrass that will be called "Surrey" has been developed by IFAS. It has the productivity of Marshall ryegrass but also is resistant to rust disease. Ryegrasses with good rust resistance are especially needed in peninsular Florida. Some seed may be available this fall and should be in good supply in the fall of 1990.

Several new forage legumes are in the works. Seed is being increased of a recently released nematode resistant alyceclover, and a new soft seeded hairy indigo. Work is progressing on the development of an improved variety of aeschynomene and a red clover especially adapted to Florida's climate. Work also continues on screening of perennial peanut lines. Perennial summer legumes adapted to central and south Florida are being

studied. One from the group called stylosanthes may be released as a named cultivar in one to two years. A perennial summer legume called Shaw's Creeping Vigna has proven to be adapted at the Ona Research and Education Center. Seed are available from Australia, but at this time are still quite expensive. Several other forage species are being studied but are now only in the very early stages of development.

Ranchers are challenged to take advantage of some of these new forage crops whenever the opportunity arises. Most of the legumes can be overseeded on established grass pastures. But, new perennial grasses need to be planted on clean-tilled land, and most producers will probably be hesitant to tear up a productive pasture in order to plant a new grass. However, after many years of use, some of our improved pastures need to be renovated due to their lowered productivity. Low productivity may be caused by invasion of smutgrass or other weedy plants and by loss of stand of the perennial pasture grass due to damage from overgrazing or molecrickets. In this situation it may be desirable to plow up such a pasture and plant a high quality annual forage crop for one or more seasons. Growing of the annual forage crops, along with the cultivation needed for seedbed preparation, will help eliminate weed seeds and the remainder of the old pasture grass. After an appropriate amount of time, one of the new perennial grass species can be established.

Timely harvesting of hay in Florida is difficult due to summer thundershowers and high humidity. New forage conservation methods are being developed that will allow for timely harvest and storage of higher quality forage. Roll bale silage treated with certain additives and covered with plastic wrap is one method under evaluation that looks very promising. Along with new methods of forage conservation, greater use of forage testing will be needed. Determining the nutrient content of hay or silage prior to feeding and supplementing with protein or energy should mean greater efficiency in feed use.

Some new and old pasture management techniques may find increased use in the nineties. Greater use of rotational grazing may occur. In some situations rotational grazing may allow for an increase in stocking rate on the ranch. It also may help or reduce pasture weed problems. It makes it easier to control or prevent overgrazing of certain forages. If cattle prices stay favorable over the next five to ten years, this should afford the opportunity to repair fences, renovate or improve pastures and catch up on many of the things that have been postponed in the recent past.

New forage cultivars, new and old pasture management techniques and new methods of forage preservation will be available in the nineties. Use of any or all of this technology to alleviate the age old problems of insufficient quantity of forage or poor seasonal distribution and inadequate or low quality forage will be your challenge for the nineties.