



Forage seed production - their problems and prospect

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Forage is plant material (mainly plant leaves and stems) eaten by grazing livestock. Historically, the term forage has meant only plants eaten by the animals directly as pasture, crop residue, or immature cereal crops, but it is also used more loosely to include similar plants cut for fodder and carried to the animals, especially as hay or silage. While the term forage has a broad definition, the term forage crop is used to define crops, annual or biannual, which are grown to be utilized by grazing or harvesting as a whole crop. Some of the forage crops are Lucerne, Sorghum, Maize, Bajara, Oat, Cowpea and Sunflower.

Livestock provides draught power, rural transport, manure, fuel, milk and meat. Most often, livestock is the only source of cash income for subsistence farms and also serves as insurance in the event of crop failure. Further, global energy crisis will lead to utilization of livestock-based bioenergy as well as waste recycling for organic manure and organic forage production for quality animal products. In the popular term, the grass includes all the plants that are grazed by livestock's. The data of fodder production in the country vary widely. Fodder production and its utilization depend on the cropping pattern, climate, socioeconomic conditions and type of livestock. The grass primarily refers to the natural botanical family known as gramineae or poaceae. The common and most vital role of grasses is its use as fodder and pasture for the domestic animals more particularly ruminants.

At present, very little arrangement exist in our country for the production and distribution of genetically pure good quality fodder seeds in an organized manner. Hence a major portion of demand for fodder seeds is met from the low quality spurious seeds as indicated earlier. The low production of the badly needed certified seed of forage crops, which is a must for higher fodder production, is attributed to certain constraints. These are as follows,

Compared to the amount of research work done on breeding of high yielding varieties of food and cash crops, there has been very little work on the forage crops,

especially varieties with both, high forage and seed yield are rarely available.

Also due to diversification of species, popularities in pollination, seed setting and other specific problem in the maintenance of the identity of strains, breeding programme of forage crops is very complex and difficult. In most of the cross pollinated crops, maintenance of purity in the individual plant types is difficult. Inbreeding in many types of forage crops is also tedious due to self sterility. Another drawback in the breeding programme of the forage crops is lack of adequate germplasm materials. breeding programme in forage crops mainly aim at improving quality and quantity of forage production whereas, seed production ability has been of secondary importance, because of this, all the forage crops are essentially shy seeders and this is one of the major factors responsible to restrict the quick spread of high yielding variety of forages crops over a large area.

Also, due to low seed yields and longer duration of the seed crops, producers are not interested in forage seed production. However, with the help of certain suitable agronomic practices, the seed yields can be

increased substantially by reducing vegetative growth. Further, research work in this direction is very much needed. Forage crops which are other-wise adaptable to wide range of climatic conditions shows a considerable amount of sensitivity of temperature and weather conditions particularly when grown for seed production. These limits forage seed production to certain specific areas only, where climatic conditions are most favourable.

Another problem which restricts seed production in forages is that the seeds of most forages crops do not have any alternate sale value. Carrying over seed stocks reduces viability ends sometimes in total loss. However, in view of planned dairy development programme and the immediate need to increase forage production in milk shed areas, the demand for good quality fodder seeds in the country is rapidly increasing. As such, there should not be difficult to sell them at a remunerative price.

