Where Applicable:

Herbaceous weed control by banding is primarily conducted in improved or native pastures and light semi-open fields. However, this method can also be performed on cutover tracts where adequate site preparation has been conducted.

Description:

The primary herbicides used in banding operations are imazapyr (Arsenal) and sulfometuron methyl (Oust). Other chemicals may be added to the tank mix for an additional cost to broaden the control of undesirable plant species. Bands are applied using rubber-tired tractors, ATV’s, or backpack sprayers. Rubber tired tractors are equipped with rear-mounted spray tanks and booms with adjustable nozzles for treating several rows simultaneously. ATV’s with rear-mounted tanks are also commonly used but normally spray only one row at a time. Backpack sprayers are sometimes used when acreage, tract location, or other factors make the use of other equipment impractical. Herbicides are generally applied in 3-4 foot wide bands. 4-foot bands or wider are preferred as encroachment of herbaceous material is delayed longer than with more narrow bands. Application is normally conducted in April-May with effectiveness reduced after June 1. It is a violation of Federal Law to use these products in a manner inconsistent with their labeling (see specimen labels for general information, directions for use, precautionary statements, mixing and application instructions, etc.).

Benefits:

Application of herbicide by banding reduces competition between the newly planted seedlings and established herbaceous weeds and grasses. Water, and nutrients within the banded row that would otherwise have been utilized by the herbaceous material is made available to the pines. Although still dependent upon spring rains, summer weather and the quality of the planting operation, first year survival and growth is significantly improved through the use of this practice. Depending upon seedling spacing, improved pasture grasses may still be cut and baled for several years providing a continued source of revenue to the landowner. Band application of herbicides in comparison to broadcast applications reduces treatment cost.

Other Recommendations:

Consistent spacing of rows by the planting vendor will make herbicide application easier and more effective. If rows cannot be easily determined, then broadcast application by air or ground will be necessary resulting in increased application costs to the landowner. The hardest species of grass to control is Bermuda and should be actively growing before herbicide is applied. The later in the spring the herbicide is applied the better and even then, with abundant spring rains, the Bermuda grass may encroach by August. The problem with waiting until the Bermuda grass is growing is that the rows may be very difficult to locate and flagging may be needed. Goatweed (Croton sp.), shown in the picture above, is commonly one of the first herbaceous species to recover from herbicide treatment. Although it will readily become established in the treated rows, the limited amount of shade it produces will pose little threat to seedling survival and growth. All Texas Forestry Best Management Practices for silvicultural chemicals should be followed.

Cost:

Approximately $35.00-45.00 per acre for openland banding and $40.00-$60.00 for wildland banding depending upon tract size, location, availability of vendors, chemical costs, etc. In contrast, broadcast applications for complete coverage of the entire planting area will range between $50.00-60.00 per acre.