



Broad Scale Aerial Pilot Plot Seeding



Stylo seeding into Northern Australia pasture systems has been occurring for near on five decades. Over time, seed and sowing technology has come ahead in leaps and bounds, in the quest to achieve maximum returns on investments in the shortest time possible. While aerial seeding is a method that has been used for many years, either utilizing Ag planes, mustering helicopters or station aircraft, the advent of accurate GPS systems and improved flow characteristics of seed has provided an accurate and economical seeding method.

Reasons For Stylo Introduction

- Stylos provide a cost effective means of improving production in timbered country.
- Once introduced, animals will spread the stylo seed throughout the paddock via their gut.
- The quality of feed is improved especially during the dry season.
- Relatively easy to establish, however it has often been criticized for taking too long to appear within the pasture.
- Increases carrying capacity of the pasture through increased dry matter production from companion grasses taking advantage of soil fixed nitrogen.



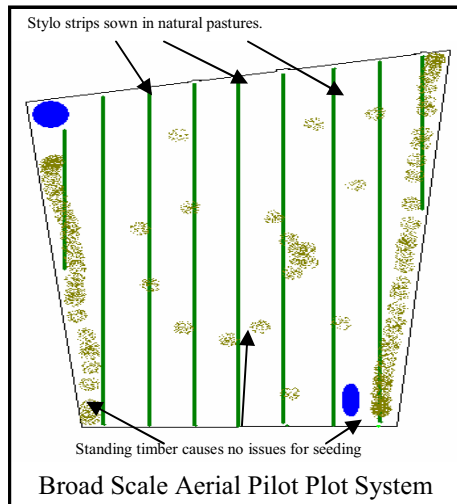
Common Methods of Introduction

- The Pilot plot system has been an effective method of introducing stylos into pasture systems for many years. It works because you have your own seed block producing seed every year for cattle to spread. Up to 100kg/Ha of seed can be produced per year under this system.
- Crocodile Seeders have also been commonly used methods of introducing stylos into timbered country on a medium scale.
- Sporadic seeding either out of mustering helicopters or behind dozers and graders traveling through the property have been a random method of introduction in pasture systems.
- With the advent of dry lick supplementation, stylo seed has been added to these mixes. Whilst it does provide the perfect environment for establishment, generally only 40-60% of the seed makes it through the rumen.
- Aerial seeding entire paddocks of stylo has also been a common practice, using extremely low rates of seed then walking your legs off for a month of Sundays trying to show the bank manager a plant to justify the money just borrowed for the work.

Broad Scale Aerial Pilot Plot Brings Quick Results

With a need to sow large areas of stylo seed quickly before a monsoon trough bring the first rains for the season, Southedge Seeds had to come up with a cost effective method of sowing their ENVIROGRO stylo seed, which has had most of the dormancy broken and is encapsulated in a moisture repelling pellet (the pellet requires at least 25mm before it is broken down), whilst providing the grazier with the results he was expecting. The result was the sowing of 5kg/ha or 53 pellets/m² in swaths of 25 metres at 100 metre intervals. This provides dense swaths that will encourage better pasture utilization as well as allowing for spread into the intervals. By reducing the grazier's application cost by 60%, he would be able to double the budgeted area to seed. Four months after the event, there could effectively be 20 plants/m², an excellent stand that will produce reasonable quantities of seed for many years to come.

“Timing is everything. The best time for sowing seed is often not the best time for sucker control and pasture renovation.”



Top:- A heavily grazed Fine Stem Stylo plant suited to the light, acidic soils of Southern and Central Queensland.
 Above:- Broad Scale Pilot Plot System where stylo seed has been sown into 20% swaths across the total paddock. Allowing for quicker spread of the stylo through the paddock. Has greater application for sowing large areas.
 Right:- A stand of Unica Stylo growing at Roma, SW Queensland. Unica makes up 50% of Southedge Seeds Caringa Stylo mix for alkaline soils in the Brigalow / Betah belt of Queensland and Northern New South Wales.
 Left:- Seca Stylo sown into native pasture under the broad scale pilot plot system.



Benefits of Broad Scale Aerial Pilot Plot Seeding

- The sowing interval is flexible to the funds available and the graziers expectations of the system.
- Due to this flexibility, alternate strips can be seeded in following years to further improve the pasture dynamics once positive cash flow has been made from the area.
- Reduced aerial application costs can allow you to sow greater areas for the same amount of money, generally 90% more area compared to 100% swath planting.
- Easier to identify if the seeding program has been successful, as strips can be identified from GPS plots.
- Seeding is done immediately prior to the start of the wet season, timely of sowing is critical to percentage field establishment.

Keys to successful establishment

- Reduce the level of competition either within the swath or across the paddock. This can be done by either heavily grazing the paddock prior to sowing or even spraying the swath out prior to sowing.
- Where pastures are going to be sown the season after a cropping phase. The stylos could possibly be sown in September, prior to harvest. This will allow the stylos to strike if rain occurs during the harvest period, and before the grasses are sown into alternative strips later in the season. Excellent weed control management is essential if this approach is to be considered.
- When purchasing seed, ensure the seed has been scarified to reduce seed dormancy, however, there does require to be some hard seed as an insurance against potential false starts.