Maize is a relatively easy crop to grow, ensile and feed. In irrigation areas maize grown for silage, provides high production per megalitre used, and can produce around 3 tonnes of dry matter per megalitre. In areas of dryland production maize can be successfully grown by adapting agronomic practices to achieve profitable crops.

By growing maize ‘on farm’ farmers can take more control of their feed requirements and reduce their dependence on brought in feeds. Maize silage grown on farm produces a valuable feed source at a known price and is not subject to market variations. Growing maize silage on farm utilizes some of the irrigation infrastructure, farm’s plant and equipment to generate income rather than paying other people to provide this feed.

Maize silage complements annual pastures and other crops grown during the winter and is a feed source that provides energy and some fibre for the herd. Maize silage has a number of other herd health benefits when incorporated into the feed supply. Feeding maize silage puts condition on cows, helps improve conception rates and provides an excellent base to rations.

DuPont Pioneer is the leading Maize Seed Company in Australia. Pioneer has bred a range of hybrids suited to silage for dairy rations. Pioneer has selected maize hybrids with high silage yield and silage quality combined with agronomic traits to ensure hybrids perform on your farm.

The importance of hybrid selection for maize silage

Consistently high yielding quality maize silage is not produced by accident. Many factors have to be taken into consideration to get the most benefit from this valuable feed. Hybrid selection is an important management decision that will have a large impact on the quality of maize silage produced.

Important attributes of a good silage hybrid are:

- High silage yield
- High grain yield (energy density)
- Correct maturity
- Good hybrid agronomic features

Yield and Quality

For producers growing maize silage on farm, silage yield is by far the most important selection criteria. A study conducted in New Zealand looked at the variation of silage yield over years. The impact of yield variation on milk income was $8672 per hectare of maize grown (Kolver et al, 2003), from the lowest yielding to the highest yielding hybrid.

Selecting hybrids with high grain yield has a large influence over the energy density of the silage. Maize silage is a unique feed because it contains both forage and grain. Table 1 outlines silage trait ratings for Pioneer hybrids.

For further information contact
DuPont Pioneer on 1800 PIONEER
or www.pioneer.com
Maize Silage

Correct Maturity

Growing the correct hybrid maturity for a given growing region is very important in order to produce quality silage. Pioneer uses comparative relative maturity (CRM) to compare the maturity of Pioneer hybrids. Growing the right maturity allows the crop to reach correct harvest maturity within the growing season. This ensures silage can be made at the correct dry matter. In addition a good harvest window ensures grain content of the crop can be maximised, further enhancing silage quality.

Hybrid Agronomics

Finally good hybrid agronomic features are a must. Hybrids must have adequate stalk strength to take the crop through to harvest. Suitable insect and disease resistance is vital for a given growing region. A good level of staygreen for the growing region is also important to permit optimal photosynthesis during late season for maximisation of starch grain fill.

STRIKE Trials

Pioneer conducts a trial program called STRIKE which stands for Seed Technology Research in Key Environments. These trials test new material that has outstanding performance in the research program against current Pioneer hybrids in a large number of environments. Environments is the key word as STRIKE trials are planted in all key maize growing regions of Australia to ensure hybrids perform on your farm.

Table 1: DuPont Pioneer Maize Hybrid Silage Trait Ratings

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<th>Stay Green</th>
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</table>

Pioneer Summer Cropping guides contain all hybrid traits. For more information on Pioneer silage hybrids contact your local Pioneer Area Manager or Pioneer Promoter Agent.

References

For further information contact
DuPont Pioneer on 1800 PIONEER or www.pioneer.com