

Maize

Maize marketing

Annual production is 250,000 tonnes of which about 150,000 tonnes is used for stockfeed. The remainder is for human consumption and is grown under contract. No maize is exported.

Maize storage

Maize needs very careful storage as it is prone to self-heating.

Moulds grow rapidly on warm moist grain, leading to stackburn, sprouting, caking, high levels of fungal damage, toxins and infestation. It is important to dry maize well. The moisture content must be below 13.5%, and preferably lower. Aeration or frequent turning is necessary to prevent [moisture migration](#).

Phosphine fumigation by the SIROFLO method may be the best pest control method. For information on maize drying, see *Farming Ahead* 69, pp.56-8.

Maize hygiene

Maize presents more fungal problems than do other cereals. This may be due to the climatic conditions in which the crop is grown.

Two pre-harvest infections are:

- *Fusarium spp.* which may lead to the presence of the mycotoxins fumonisin, deoxynivalenol (DON) and zearalenone
- and *Aspergillus sp.* which can lead to aflatoxin.

Fumonisin has been known to occur in Australia, although the extent of the problem is not known. The need to check maize will depend on the season, whether there has been fungal damage and the type of animal to be fed. Fumonisin is particularly toxic to horses and pigs. In horses it causes equine leucoencephalomalacia (ELEM) which produces holes or lesions in the brain. In pigs it causes porcine pulmonary edema (PPE). It is particularly necessary to test maize for fumonisin before it is fed to horses.

All these toxins are easily tested in laboratories offering this service, such as Agrifood Technologies Ltd [q](#).