

# Agriculture & Horticulture

## Technical Notes

Tarac Technologies provides stock feed and soil conditioning options for the agricultural and horticultural industries with a number of natural and easy to use products.

### Animal Feed Products

A variety of products have been specially formulated for incorporating into stock feed rations. The products are non-seasonal meaning they are available all year round.

Product	Description	Uses
Pellets	• 8mm diameter compressed chocolate coloured	• Suitable for ruminants such as cattle and sheep
	• Highly palatable	• Extend maintenance ration
	• Easy to incorporate	• Boost for lactating animals
	• Blended grape skins & seeds	• Available in loose bulk or 750kg bags
Meal	• Ground grape skins & seeds (powder)	• Suitable for longer term storage
		• Blend into existing ration as required
		• Suitable for larger range of animals
Grape Seeds	• Heat treated (non-germinating) grape seeds	• Available in bulk or 600kg bags
		• Crack to release benefits of oil & add to ration as required
Steam Distilled Grape Marc	• commonly known as 'spent marc'	• Available in bulk or 800kg bags
	• grape skins & seeds from winery crush, steam distilled to remove alcohol & other residues	• ration bulking ingredient
		• convenient for feed lots
		• viable alternative
		• suitable for ruminants
		• other applications include piggery bedding
		• available in bulk



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## Horticultural Products

Tarac has two products which can be used to improve the soil condition in horticultural applications from vineyards, orchards and market gardens to broad acre cropping. Both products are available in bulk and are non-seasonal.

Product	Description	Uses
<b>Steam Distilled Grape Marc</b>	<ul style="list-style-type: none"> <li>commonly known as 'spent marc'</li> <li>grape skins &amp; seeds from winery crush, steam distilled to remove alcohol &amp; other residues</li> </ul>	<ul style="list-style-type: none"> <li>high organic carbon soil conditioner with trace minerals</li> <li>apply direct or compost</li> <li>weed free non-germinating</li> </ul>
<b>TPR</b>	<ul style="list-style-type: none"> <li>Unique to Tarac's Nuriootpa site, TPR is a blend of steam distilled grape marc and other production concentrates.</li> </ul>	<ul style="list-style-type: none"> <li>successfully utilised by local farmers to improve soil condition, crop yields &amp; reduce use of manufactured fertilisers</li> <li>slow release product which can be directly applied using general purpose spreaders</li> </ul>

## TPR - Field Observations

Field observations using TPR as a soil conditioner were conducted on a Barley crop in South Australia's Barossa Valley region during the 2008 season.

	Area 1	Area 2
<b>Fertiliser / Soil Conditioner:</b>	Standard application of DAP 20 fertilizer at a rate of 60kg per hectare.	Application of DAP 20 fertilizer at a rate of 20kg per hectare and top dressed with TPR at 20 tonne per hectare.
<i>Observations - using random samples from each area:</i>		
<b>Number of Tillers in Head</b>	average of 5.2 per plant	average of 6.4 per plant
<b>Number of grains per head</b>	average of 18	average of 22

The observations indicate the potential yield difference is an increase of 22%.

The photo shows a sample of 5 plants from each observed area – plants on the left from area 1 and those on the right from area 2. The plants shown from area 2 clearly illustrate the noticeable benefits of applying TPR as a soil conditioner with reduced application rates of DAP 20 fertiliser.

TPR is a cost effective way to increase crop yields.

## Composition Data

Typical Analysis, including nutritional value, residue testing and mineral analysis, is available for all of Tarac Technologies agricultural and horticultural products upon request. The testing has been conducted by approved independent laboratories.

By-product vendor declarations are also available.

