

## TARCOWIE ROCK PHOSPHATE & CADMIUM



Tarcowie Rock Phosphate (TRP) is a locally mined phosphate rock. When compared to imported rock phosphate TRP has considerably lower heavy metal content.

The main metals seen as contaminants in fertilizers are Cadmium, Lead and Mercury. Cadmium is of the most concern as it is found in phosphorus fertilizers (rock source) and taken up by plant roots. Edible plants such as tuber, root and leaf vegetables can accumulate Cadmium **and** when consumed the Cadmium enters the food chain.

Food processors and markets may reject produce known to be high in Cadmium as they **have been** linked to long-term human health concerns. High intensity production such as horticulture are monitored, and growers are aware of Cadmium and its risks.

For this reason, maximum levels have been established under an industry code of practice for Cadmium & other heavy metals. For Cadmium the maximum levels allowed in phosphorous fertilizers is 300mg/kg per kg of P. Less than 100mg/kg per kg P is recommended where fertilizers are used at higher rates and frequency.

The table compares some commonly used fertilizers and TRP (note typical samples – content may vary depending on rock origin and processing)

	<b>% P</b>	<b>mg/kg Cd</b>	<b>mg Cd/kg P</b>
<b>Super</b>	<b>8.8</b>	<b>15-25</b>	<b>180-300</b>
<b>MAP</b>	<b>21.9</b>	<b>10-15</b>	<b>45-75</b>
<b>DAP</b>	<b>20.0</b>	<b>5-10</b>	<b>25- 50</b>
<b>TRP</b>	<b>6.2</b>	<b>0.4 -0.6</b>	<b>0.64 – 0.97</b>

For the horticulturalist, organic grower & home gardener, TRP should be a strong consideration to add phosphorus and other minerals to build the base fertility in your soil. Best applied as a preplant broadcast option, it can be used at high rates and frequency with low Cadmium risk.

TRP naturally contains up to 60 additional minerals and trace elements (refer to our specification sheet) or can be mixed with chicken manure pending your requirements.