NPK vs VERMICAST APPLICATION

MYNOKE
Soil to Soil™

The following is a comparison between NPK fertilisers and vermicast application.
The two can be complementary, with vermicast supporting improved soil structure and microbial life, whilst NPK may provide a quick boost if plants show specific nutrient deficiencies.

NPK FERTILISER	ASPECT	VERMICAST APPLICATION
Generally lower cost per tonne. Requires purchase of multiple individual fertilisers.	**Upfront Cost**	Higher cost per tonne.
Lower per hectare (often 100-200kg per hectare).	**Application Rate**	Higher application rates (typically 5+ tonnes per hectare).
More frequent (multiple times per season).	**Frequency of Application**	Fewer applications needed (often one per season), due to sustained nutrient release.
Lower cost per cycle but recurring for every season.	**Cost per Application Cycle**	Higher per cycle, but may reduce the need for additional inputs over time.
Typically requires less labour per application. Can be broadcast applied.	**Labour & Equipment Costs**	May require more labour for distribution, especially for bulk amounts. Can be broadcast applied.
Easier and cheaper to transport in concentrated form.	**Storage and Transportation**	Bulky and heavier, increasing transport and storage costs.
Provides fast growth response but may plateau in effectiveness.	**Yield Impact**	Tends to improve soil health and yields over time, reducing the need for synthetic inputs.
Primarily mineral nutrients specific to applied fertiliser.	**Nutrient Content**	Broad spectrum of both mineral and organic nutrients, including micronutrients, beneficial microbes, and humic substances.
Generally quick-release, providing a fast boost.	**Nutrient Release**	Slower-release, offering longer-lasting nutrient availability.
Leads to soil acidification and salt build-up with repeated use. Requires repeat application of lime to balance pH of soil.	**Soil Health**	Improves soil structure, moisture retention, and promotes microbial life. Neutralises soil pH, reducing reliance of agLime.
High potential for pollution via run-off (P) and leaching (N).	**Environmental Impact**	Minimal run-off; nutrients are in stable, bioavailable form.
Typically sterile and does not add microbes.	**Microbial Content**	Contains a rich mix of beneficial microorganisms that enhance soil biology.
Does not add organic matter or carbon to soil.	**Soil Organic Matter**	Adds organic matter and carbon, improving soil aeration and structure.
May lead to soil degradation with continuous use.	**Long-Term Usage**	Enhances soil fertility, resilience, and health over time.
Ongoing expense without improving soil structure.	**Long-Term Investment**	Adds organic matter, reducing future fertiliser dependency and potentially cutting costs.
Generally higher risk of fines or additional costs for managing runoff or leaching.	**Environmental Compliance Costs**	Generally lower compliance costs due to minimal environmental impact when applied appropriately.
May require additional soil amendments over time.	**Soil Health-Related Savings**	Reduces need for other soil amendments due to organic matter and microbe content.