

## Starpharma's formulation shows improvement in crop protection

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**Singapore:** Starpharma Holdings announced that its new agrochemical dendrimer formulations have shown further improved features compared to commercially available products. Starpharma has conducted a whole range of new studies in its internal agrochemical program including with its lead program, an enhanced reformulation of the best-selling herbicide glyphosate.

In addition to the improved efficacy, Starpharma has also recently shown its formulations to be more rain-fast compared to glyphosate formulations without dendrimer. Starpharma's dendrimer formulations demonstrated up to a 150-to-250 percent improvement in efficacy when rain was applied four hours after treatment with the test formulations. Glyphosate has global sales of approximately \$5 billion annually and as an off-patent chemical represents the largest opportunity for an enhanced formulation in the \$44 billion agrochemical market.

"In addition to improving major products such as glyphosate, there are crop protection products with sales of more than \$5 billion which will come off patent in the next 4-5 years. This creates a significant commercial opportunity for Starpharma's dendrimers to deliver improved, proprietary formulations to this large and growing market," said Dr Jackie Fairley, Chief Executive Officer.

Other recent formulation activities at Starpharma have been targeted at improving the loading of commercially important crop protection products. Using formulations that include dendrimers, Starpharma has increased the loading of one important herbicide by 50% more than formulations currently available in the market. High loading formulations generally have an improved cost of goods by reducing transport and handling costs and are sought after by both farmers and crop protection companies.

Soil penetration is also important for the performance of some crop protection products to ensure that they reach their targets. In laboratory studies using imidacloprid, a US\$1BN product, Starpharma has shown that its dendrimers can tailor how this important insecticide moves by either increasing or decreasing percolation through a substrate. Common uses of imidacloprid include termite control and the control of other soil inhabiting insects.

In addition to its internal programs Starpharma continues to advance existing agrochemical partnerships, and in August announced a new Crop Protection Agreement with Nufarm. Nufarm is one of the world's leading crop protection companies with sales in excess of A\$2billion.