Asian farmers would see annual weed control costs increase by $1.4 to $1.9 billion due to potential restrictions on glyphosate use, new study reports

A new paper published in the journal Agbioforum¹ points to higher weed control costs, less effective weed control, more difficult access to fields and lower yields, if farmers in seven Asian countries could no longer use glyphosate.

The peer reviewed paper written by Graham Brookes of PG Economics Ltd examined the current use of glyphosate, the reasons for its use and what changes farmers would make to their weed control programs if glyphosate was no longer available for use. Seven countries were included in the study – Australia, China, India, Philippines, Indonesia, Vietnam and Thailand – as these were representative of countries where glyphosate use in agriculture is significant, countries that may be considering use restrictions for glyphosate and countries where farmers are planting glyphosate tolerant crops.

Glyphosate is widely used for weed control across Asia and few alternatives are available that provide equivalent levels of performance in field and plantation crops. Without access to glyphosate, farmers reported they would use additional herbicide combinations and/or rely on mechanical/hand weeding options. These alternatives would have significant impacts including reduced weed control, increased pest levels, reduced access to fields and higher weed control costs.

The study estimates that annual weed control costs would increase across the seven countries by between $1.4 billion and $1.9 billion, with average increases in cost ranging from $22/ha to $30/ha. This is a significant increase in production costs and if the potential impact of lower yields is included, this represents an important loss of global competitiveness for farmers who lose access to glyphosate.

The economic and environmental benefits of planting glyphosate tolerant corn and cotton in Australia, Philippines and Vietnam will also be lost. Without glyphosate, farmers will be less able to realise the environmental benefits of no and reduced tillage such as a lower levels of carbon emissions, less soil erosion and greater soil moisture content.

For additional information, contact Graham Brookes at Tel +44(0) 1432 851007.

www.pgeconomics.co.uk