

## Performance of pre- and tank-mixed herbicide formulations on the control of common weeds and Wel kohila (*Syngonium spp*) present in tea fields

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Three field experiments were conducted at the low country station of the Tea Research Institute, Ratnapura to investigate the performance of pre- and tank -mixed herbicide formulations on the control of common weeds. A pot experiment was also conducted to control Wel kohila (*Syngonium spp.*) weed

Six different herbicide cocktail mixtures were applied on common weeds under field conditions as pre- and tank-mixed solutions. There was no significant difference in weed dry weight between pre- and tank-mixed herbicide formulations ( $p>0.05$ ). But, weed dry weight was significantly reduced in treatments such as MCPA (60%) @ 2.4 mL L<sup>-1</sup> + Glyphosate @ 5 mL L<sup>-1</sup>, MCPA (60%) @ 2.4 mL L<sup>-1</sup> + Paraquat @ 2 mL L<sup>-1</sup> and Oxyfluorfen @ 2 mL L<sup>-1</sup> + Glyphosate @ 5 mL L<sup>-1</sup> mixtures. Cocktail mixtures *i.e.* MCPA (60%) @ 2.4 mL L<sup>-1</sup> + Diuron @ 2 mL L<sup>-1</sup> + Glyphosate @ 5 mL L<sup>-1</sup> and Glyphosate @ 10 mL L<sup>-1</sup> + MCPA (60%) @ 2.4 mL L<sup>-1</sup> were applied as pre- and tank-mixed solutions on potted Wel kohila (*Syngonium spp.*) plants.

All chemical mixtures significantly reduced the weed growth compared to control. Mixing of two herbicides performed better than mixing of three herbicides with Diuron as additional herbicide irrespective of the time of mixing.

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