**Evaluation of Spray Adjuvants for Use with Herbicides for Broom Snakeweed Control**

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How effective are spray adjuvants for enhancing snakeweed control?

Adjuvants are materials added to a pesticide mixture in the spray tank to improve mixing and application or enhance pesticide performance. While pesticides are formulated to be suitable to many types of application conditions, they cannot be formulated for all possible situations. Adjuvants are used to customize the formulation to specific needs and compensate for local conditions—commonly, to improve wetting ability of a spray solution, control evaporation, improve weatherability, enhance uptake of pesticide into plants, improve spray deposition, and reduce drift.

This paper reports on studies with adjuvants used with picloram for broom snakeweed control.

Picroram applied at one-half the recommended rate has been shown to control snakeweed successfully about 60% of the time based on spray trials conducted by NMSU over the past 12 years. Failure to control snakeweed 40% of the time using rates lower than recommended is not acceptable to producers, but the use of a surfactant could increase pesticide contact and uptake by snakeweed and possibly improve effectiveness of the herbicide. This study examines the benefit of adding a surfactant to low rates of picloram. The results (Table 1) from spray trials with an organo-
Robert Santerz is an extension professor of

<table>
<thead>
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<th>Program</th>
<th>Additional</th>
<th>252%</th>
<th>222%</th>
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<td>8.8</td>
<td>13.2</td>
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<td>3.8</td>
<td>13.8</td>
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</tr>
<tr>
<td>3.6</td>
<td>13.8</td>
<td>227</td>
<td>218</td>
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Table 2: Drip irrigation parameters for programs with

operating at a pressure of 15 psi in a 110 mph system.

and without irrigation, when sprayed through a 25 m nozzles

Effects

Moe work on advising is needed to determine these

expansion rate of the mixture. Option size and drip could still be

reduced in the region of expansion. If expansion changes the

nozzles, this study may need the mixture specific parameters.

However, the study did not differ for each mixture (Table 2).

Each study, the volume median diameter (VMD) was 4.4 psi

and the volume diameter (VMD) was 4.4 psi. The volume

median diameter was measured as a descriptor in

nonuniformity in the amount of water. The data

were determined in a wind tunnel using less radian per degree

mixing through a 150-450 nozzle. A standard radian

measurements were used at the minimums

was added to the mixture. When the mixture was

nonuniformly, after the amount of cycle. These cycle-4

specific can potentially affect the amount of cycle. These cycle-

s in sample diameter and drip, mix especially important in apply-

The mixture specific is one of the most important factors

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