

Table 4. Major postemergence herbicides for weed control in DSR in the Eastern Gangetic Plains (adapted from Kumar and Ladha 2011).

Herbicide (active ingredient, a.i.)	Product (trade name)*	Concentration (g a.i./ha)	Product dose (g/ha or mL/ha)	Application time (DAS)	Strengths	Weaknesses
<i>Postemergence</i>						
Bispyribac-sodium	Nominee Gold/ Adora	25	250 mL	15–25	Broad-spectrum weed control of grasses, broadleaves and annual sedges. Good control of <i>Echinochloa</i> species.	Poor on grasses other than <i>Echinochloa</i> species, including <i>Leptochloa chinensis</i> , <i>Dactyloctenium aegyptium</i> , <i>Eleusine indica</i> , <i>Eragrostis</i> species. No residual control.
Penoxsulam	Granite	22.5	93.75 mL	15–20	Broad-spectrum weed control of grasses, broadleaves, and annual sedges.	Poor on grasses other than <i>Echinochloa</i> species, including <i>L. chinensis</i> , <i>D. aegyptium</i> , <i>E. indica</i> , <i>Eragrostis</i> species.
Fenoxaprop-ethyl + safener	Rice star	60–90	870–1,300 mL	15–20	Good control of annual grassy weeds, safe on rice at early stage.	Does not control broadleaves and sedges.
Azimsulfuron	Segment	17.5–35	35–70 g	15–20	Broad-spectrum control of grasses, broadleaves, and sedges. Good control of sedges, including <i>Cyperus rotundus</i> .	Poor on <i>Echinochloa</i> species.
Ethoxysulfuron	Sunrice	18	120 g	15–20	Effective on broadleaves and annual sedges.	Does not control grasses and poor on perennial sedges.
2,4-D ethyl ester	Weedmar	500	1,250 mL	15–25	Effective on broadleaves and annual sedges. Economical. Has no residual control	Does not control grasses.
Carfentrazone	Affinity	20	50 g	15–20	Effective on broadleaf weeds. Has no residual control.	Does not control grasses.

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Herbicide (active ingredient, a.i.)	Product (trade) name*	Concentration (g a.i./ha)	Product dose (g/ha or mL/ha)	Application time (DAS)	Strengths	Weaknesses
Chlorimuron + metsulfuron	Almix	4 (2 + 2)	20 g	15–25	Effective on broadleaves and annual sedges.	No control of grassy weeds and poor on <i>C. rotundus</i> .
Bispyribac sodium + azimsulfuron		25 + 17.5	250 mL + 35 g	15–25	Broad-spectrum weed control of grasses, broadleaves, and sedges, including <i>C. rotundus</i> .	Poor on grasses other than <i>Echinochloa</i> species.
Bispyribac sodium + pyrazosulfuron		25 + 25	250 mL + 250 g	15–20	Broad-spectrum weed control of grasses, broadleaves, and sedges, including <i>C. rotundus</i> .	Poor on grasses other than <i>Echinochloa</i> species.
Fenoxaprop + ethoxysulfuron		60 + 18	645 mL + 120 g	15–25	Broad-spectrum weed control of grasses, broadleaves, and sedges. Good control of all major grasses, including <i>L. chinensis</i> and <i>D. aegyptium</i> .	Poor on perennial sedges such as <i>C. rotundus</i> .
Propanil + pendimethalin		4,500 + 1,000	12,850 mL + 3,333 mL	10–12	Broad-spectrum weed control with residual effects.	Poor on sedges such as <i>C. rotundus</i> .

* Does not imply endorsement of the product.