



Postemergence herbicides for control of morphotypes and genotypes of colombian weedy rice

Juan Velásquez R.¹; Verónica Hoyos¹; Guido Plaza¹

Universidad Nacional de Colombia, Bogotá, Colombia¹

Weedy rice (*Oryza sativa* L.) is a conspecific weed to cultivated rice (*Oryza sativa* L.) and is the second most important grass species responsible for rice yield losses in Colombia. Weedy rice has great morphological and genetic variability and multiple origins in this country. This study evaluates the differential response to chemical control of five morphotypes (awned with black and straw hulls and awnless with brown, straw and black hulls) and five genotypes (according to the proportion of *aus* and *indica* ancestry) present in Colombian rice fields. The most frequent herbicides families used to control this weed were evaluated (glycines and imidazolinones). All accessions were treated in three to four leaf stage with commercial doses of the active ingredient (glyphosate: 960 g ai ha⁻¹ and imazamox + imazapyr: 49.5 and 22.5 g ai ha⁻¹). Results indicated the morphotypes evaluated were efficiently controlled (>91%) by glyphosate herbicide. The imidazolinones treatment controlled four morphotypes; however, the control level of awned with straw hulls morphotype was deficient (<40%), a possible case of herbicide resistance for this accession. All the genotype evaluated showed better control by glyphosate than imazamox + imazapyr. Furthermore, there were a higher control for the 100% *aus* genotype compared to the 100% *indica* genotype by imazamox + imazapyr.

Palavras-chave: *Oryza sativa*, glyphosate, imazamox + imazapyr, red rice

Apoio: Universidad Nacional de Colombia, Bogotá, Colombia



Sociedade Brasileira da
Ciência das Plantas Daninhas
(Brazilian Weed Science Society)