

Table 1. Influence of root-applied isoxaben to hydroponically-grown ajuga, wintercreeper and dwarf burning bush¹.

Species	Percent shoot injury ²		Root rating ³	Percent weight reduction	
	3 WAT	6 WAT		Shoot ⁴	Root ⁵
			6 WAT	6 WAT	6 WAT
Ajuga	15a	30a	4a	20a	40a
Wintercreeper	2b	5b	1b	1b	15b
Dwarf burning bush	6b	8b	1b	3b	18b

¹Means followed by the same letter within a column are not significantly different according to Fishers protected LSD at P = 0.05 level.

²Shoot injury was rated on a scale of 0 to 100 (0 = no injury; 100 = complete kill)

³Root rating was on a scale of 1 to 10 (1 = healthy roots; 10 = dead roots)

⁴Shoot weights of untreated plants were: ajuga = 6.59 g, wintercreeper = 2.42 g and dwarf burning bush = 2.98 g.

⁵Root weights of untreated plants were: ajuga = 4.93 g, wintercreeper = 0.95 g and dwarf burning bush = 2.28 g.

Table 2. Influence of shoot-applied isoxaben on shoot and root injury to hydroponically grown ajuga, wintercreeper and dwarf burning bush¹.

Species	Isoxaben rate (kg/ha)															
	0				0.84				1.69				3.39			
	Shoot injury ² 3 WAT				Shoot injury ² 6 WAT				Root rating ³ 6 WAT							
Ajuga	2a	12a	11a	17a	0a	29a	24a	39a	1a	7a	7a	8a				
Winter creeper	0a	0b	0b	0b	0a	0b	0b	0b	1a	1b	1b	1b				
Dwarf burning bush	3a	13a	17c	14a	1a	25a	27a	30a	1a	2b	2b	2b				

¹Means followed by the same letter within a column are not significantly different according to Fisher's Protected LSD at P = 0.05 level.

²Shoot injury was rated on a scale of 0 to 100 (0 = no injury; 100 = complete kill).

³Root rating was on a scale of 1 to 10 (1 = healthy roots; 10 = dead roots).

Table 3. Influence of shoot-applied isoxaben on shoot and root weight in hydroponically grown ajuga, wintercreeper and dwarf burning bush¹.

Species	Isoxaben rates (kg/ha)					
	Shoot fresh weight reduction ²			Root fresh weight reduction ³		
	0.84	1.69	3.39	0.84	1.69	3.39
Ajuga	17a	17a	48a	17a	12a	32a
Wintercreeper	0b	0b	10b	0b	3b	3b
Dwarf burning bush	0b	6b	8b	0b	8b	20a

¹Means followed by the same letter within a column are not significantly different according to Fishers Protected LSD at P = 0.05 level.

²Shoot weight of untreated ajuga = 7.76 g; wintercreeper = 4.46 g and dwarf burning bush = 4.54 g.

³Root weight of untreated ajuga = 2.07 g, wintercreeper = 1.58, dwarf burning bush = 1.55 g.

Table 4. Analysis of main and interaction effects of ornamental species, isoxaben rates and application type on shoot injury, root injury, and shoot and root fresh weight two months after treatment (MAT) in the sand study.

Effects	Significance ¹			
	Percent injury		Percent weight reduction	
	Shoot	Root	Shoot	Root.
Species	*	NS	*	*
Isoxaben rate	*	NS	NS	*
Species x rate	*	NS	*	*
Application type	*	NS	NS	*
Species x Application type	*	NS	NS	NS
Rate x application type	*	NS	NS	NS
Species x rate	*	NS	NS	NS
Species x rate x application type	*	NS	NS	NS

¹ * = Significant at P = 0.05 level, NS = not significant at P = 0.05 level.

Table 5. Shoot injury observed one and two months after treatment (MAT) following isoxaben application to roots, foliage and foliage plus roots of ornamentals grown in sand¹.

Species	Shoot injury ² (1 MAT)								
	Isoxaben (kg/ha)								
	0.84	1.69	3.39	0.84	1.69	3.39	0.84	1.69	3.39
	Root application			Shoot application			Root+Shoot application		
Ajuga	12a	14a	18a	28a	31a [*]	32a	32a	35a	36a
Winter- creeper	0b	cb	0b	0b	0c	0c	0c	0c	0c
Dwarf burning bush	18a	17a	19a	25a	22b	23b	21b	23b	20b
	Shoot injury (2 MAT)								
Ajuga	20a ¹	33a	35a	42a	41a [*]	42a	38a	41a	49a
Winter- creeper	0b	0c	0c	0c	0c	0c	0b	0c	0c
Dwarf burning bush	21a	18b	21b	22b	23b	23b	39a	30b	31b

¹Means followed by the same letter within a column are not significantly different according to Fisher's Protected LSD at P = 0.05 level.

²Shoot injury was rated on a scale of 0 to 100, with 0 = no injury and 100 = complete kill.

Table 6. Effect of isoxaben application type, averaged over application rate, on root and shoot fresh weight reduction in three ornamentals grown in sand¹.

Species	Method of application							
	Root	Shoot	Root+ Shoot	Mean	Root	Shoot	Root+ Shoot	Mean
	Root weight reduction ²				Shoot weight reduction ³			
Ajuga	44	62	58	55a	33	44	34	37a
Wintercreeper	19	7	14	13b	17	6	15	13b
Dwarf burning bush	8	21	32	20b	7	13	7	9b
Means	24b ¹	30a	35a		19a	21a	19a	

¹Means followed by the same letter within a row or column for root or shoot weight reductions are not significantly different according to Fishers Protected LSD at P = 0.05 level.

²Root weights of untreated plants were: ajuga = 2.83 g, wintercreeper = 2.09 g and dwarf burning bush = 2.97 g.

³Shoot weights of untreated plants were: ajuga = 2.77 g, wintercreeper = 4.94 g and dwarf burning bush = 4.75 g.

Table 7. Effect of isoxaben application rate, averaged over application type, on root and shoot fresh weight reduction in three ornamentals grown in sand¹.

Species	Isoxaben (kg/ha)					
	Root weight reduction			Shoot weight reduction		
	0.84	1.69	3.39	0.84	1.69	3.39
Ajuga	48a	53a	65a	32a	35a	45a
Wintercreeper	5b	6b	28b	7b	10b	22b
Dwarf burning bush	10b	19b	35b	5b	8b	15b

¹Means followed by the same letter within a column are not significantly different according to Fishers Protected LSD at P = 0.05 level.

²Shoot weights of untreated plants were: ajuga = 2.77 g, wintercreeper = 4.94 g and dwarf burning bush = 4.75 g.

³Root weights of untreated plants were: ajuga = 2.83 g, wintercreeper = 2.09 g and dwarf burning bush = 2.97 g.