

Supplementary Materials

Table S1. Plant growth of sweet potato looking at total shoot length, main stem length, total branch length, branch number, leaf area, and total biomass under monoculture and mixed-culture conditions with three invasive plants (*Ageratum conyzoides* L., *Bidens pilosa* L., and *Galinsoga parviflora* Cav.).

Variables		Ratios (Sweet Potato:Invasive Plant)			
		4:0	2:1	1:1	1:2
Total shoot length (cm)	<i>A. conyzoides</i>	69.0±1.0 ^d	79.4±0.3 ^c	88.8±0.4 ^b	94.0±0.7 ^a
	<i>B. pilosa</i>	69.0±1.0 ^d	80.3±1.6 ^c	85.9±3.0 ^b	90.1±2.3 ^a
	<i>G. parviflora</i>	69.0±1.0 ^d	77.9±1.0 ^c	81.8±1.0 ^b	86.9±0.9 ^a
Main stem length (cm)	<i>A. conyzoides</i>	48.7±0.5 ^d	52.4±0.2 ^c	57.2±0.3 ^b	60.5±0.4 ^a
	<i>B. pilosa</i>	48.7±0.5 ^c	53.1±1.0 ^b	55.0±1.8 ^b	57.6±1.8 ^a
	<i>G. parviflora</i>	48.7±0.5 ^c	51.8±1.0 ^b	52.3±0.9 ^b	54.1±1.2 ^a
Total branch length (cm)	<i>A. conyzoides</i>	20.3±1.0 ^d	27.0±0.1 ^c	31.7±0.1 ^b	33.5±0.5 ^a
	<i>B. pilosa</i>	20.3±1.0 ^c	27.2±1.7 ^b	30.9±1.3 ^a	32.5±0.8 ^a
	<i>G. parviflora</i>	20.3±1.0 ^d	26.1±0.1 ^c	29.6±0.3 ^b	32.8±0.3 ^a
Branch number	<i>A. conyzoides</i>	6.3±0.2 ^d	7.3±0.1 ^c	8.5±0.2 ^b	9.5±0.1 ^a
	<i>B. pilosa</i>	6.3±0.2 ^d	7.4±0.1 ^c	8.2±0.2 ^b	8.4±0.1 ^a
	<i>G. parviflora</i>	6.3±0.2 ^c	6.5±0.1 ^c	7.5±0.2 ^b	8.0±0.4 ^a
Leaf area (cm ²)	<i>A. conyzoides</i>	62.4±0.8 ^d	63.6±0.3 ^c	65.1±0.1 ^b	66.5±0.4 ^a
	<i>B. pilosa</i>	62.4±0.8 ^c	64.4±0.4 ^b	67.7±0.3 ^a	68.2±0.4 ^a
	<i>G. parviflora</i>	62.4±0.8 ^d	66.4±0.5 ^c	69.4±0.4 ^b	70.3±0.1 ^a
Total biomass (g)	<i>A. conyzoides</i>	38.45±0.45 ^d	40.60±0.26 ^c	42.36±0.40 ^b	44.52±0.09 ^a
	<i>B. pilosa</i>	38.45±0.45 ^d	39.94±0.20 ^c	42.17±0.31 ^b	43.49±0.47 ^a
	<i>G. parviflora</i>	38.45±0.45 ^d	41.63±0.09 ^c	42.43±0.43 ^b	43.51±0.09 ^a

Data are expressed as the mean ± standard deviation. The different letters within the same row signify significant differences at $p < 0.05$.

Table S2. Photosynthetic and antioxidant enzyme properties of sweet potato under monoculture and mixed-culture conditions with three invasive plants (*Ageratum conyzoides* L., *Bidens pilosa* L., and *Galinsoga parviflora* Cav.).

Variables		Ratios (Sweet Potato:Invasive Plant)			
		4:0	2:1	1:1	1:2
Pn ($\mu\text{mol CO}_2 \text{ m}^{-2} \text{ s}^{-1}$)	<i>A. conyzoides</i>	11.83 \pm 0.04 ^{dc}	11.85 \pm 0.03 ^c	12.31 \pm 0.04 ^a	12.12 \pm 0.02 ^b
	<i>B. pilosa</i>	11.83 \pm 0.04 ^d	12.10 \pm 0.03 ^c	12.51 \pm 0.02 ^b	12.99 \pm 0.16 ^a
	<i>G. parviflora</i>	11.83 \pm 0.04 ^d	11.91 \pm 0.1 ^c	12.68 \pm 0.03 ^a	12.21 \pm 0.08 ^b
Gs ($\text{mol H}_2\text{O m}^{-2} \text{ s}^{-1}$)	<i>A. conyzoides</i>	0.28 \pm 0.01 ^c	0.34 \pm 0.01 ^a	0.32 \pm 0.01 ^b	0.28 \pm 0.02 ^c
	<i>B. pilosa</i>	0.28 \pm 0.01 ^c	0.36 \pm 0.01 ^a	0.34 \pm 0.01 ^b	0.36 \pm 0.01 ^a
	<i>G. parviflora</i>	0.28 \pm 0.01 ^d	0.29 \pm 0.01 ^c	0.35 \pm 0.01 ^a	0.34 \pm 0.01 ^b
Tr ($\text{mmol H}_2\text{O m}^{-2} \text{ s}^{-1}$)	<i>A. conyzoides</i>	4.42 \pm 0.03 ^d	4.66 \pm 0.03 ^c	4.84 \pm 0.01 ^a	4.73 \pm 0.03 ^b
	<i>B. pilosa</i>	4.42 \pm 0.03 ^c	4.79 \pm 0.02 ^a	4.77 \pm 0.01 ^a	4.74 \pm 0.01 ^b
	<i>G. parviflora</i>	4.42 \pm 0.03 ^c	4.83 \pm 0.01 ^b	4.96 \pm 0.01 ^a	4.84 \pm 0.01 ^b
SOD (U/g FW)	<i>A. conyzoides</i>	822.13 \pm 8.31 ^d	853.98 \pm 2.42 ^c	887.52 \pm 4.43 ^b	903.41 \pm 7.19 ^a
	<i>B. pilosa</i>	822.13 \pm 8.31 ^d	851.08 \pm 3.65 ^c	874.94 \pm 8.85 ^b	890.20 \pm 10.31 ^a
	<i>G. parviflora</i>	822.13 \pm 8.31 ^d	858.87 \pm 7.59 ^c	882.53 \pm 6.20 ^b	917.29 \pm 7.89 ^a
CAT ($\mu\text{mol}/\text{min}/\text{g FW}$)	<i>A. conyzoides</i>	509.86 \pm 1.30 ^d	558.69 \pm 2.33 ^c	578.71 \pm 3.32 ^b	587.07 \pm 3.78 ^a
	<i>B. pilosa</i>	509.86 \pm 1.30 ^d	550.03 \pm 1.59 ^c	568.41 \pm 1.94 ^b	573.36 \pm 2.87 ^a
	<i>G. parviflora</i>	509.86 \pm 1.30 ^c	529.10 \pm 3.19 ^b	552.19 \pm 4.57 ^a	558.51 \pm 6.57 ^a
POD ($\Delta\text{OD}_{470}/\text{min}/\text{g FW}$)	<i>A. conyzoides</i>	704.05 \pm 11.45 ^d	795.25 \pm 6.35 ^c	855.01 \pm 6.30 ^b	936.42 \pm 10.76 ^a
	<i>B. pilosa</i>	704.05 \pm 11.45 ^d	751.75 \pm 3.99 ^c	819.21 \pm 2.72 ^b	852.55 \pm 7.89 ^a
	<i>G. parviflora</i>	704.05 \pm 11.45 ^c	731.22 \pm 6.25 ^{ab}	734.69 \pm 3.69 ^a	723.48 \pm 2.68 ^b

Data are expressed as the mean \pm standard deviation. Pn=net photosynthetic rate, Gs=stomatal conductance, Tr=transpiration rate, SOD=superoxide dismutase, CAT=catalase, and POD=peroxidase. The different letters within the same row mean significant differences at $p < 0.05$.