

Supplementary Figures

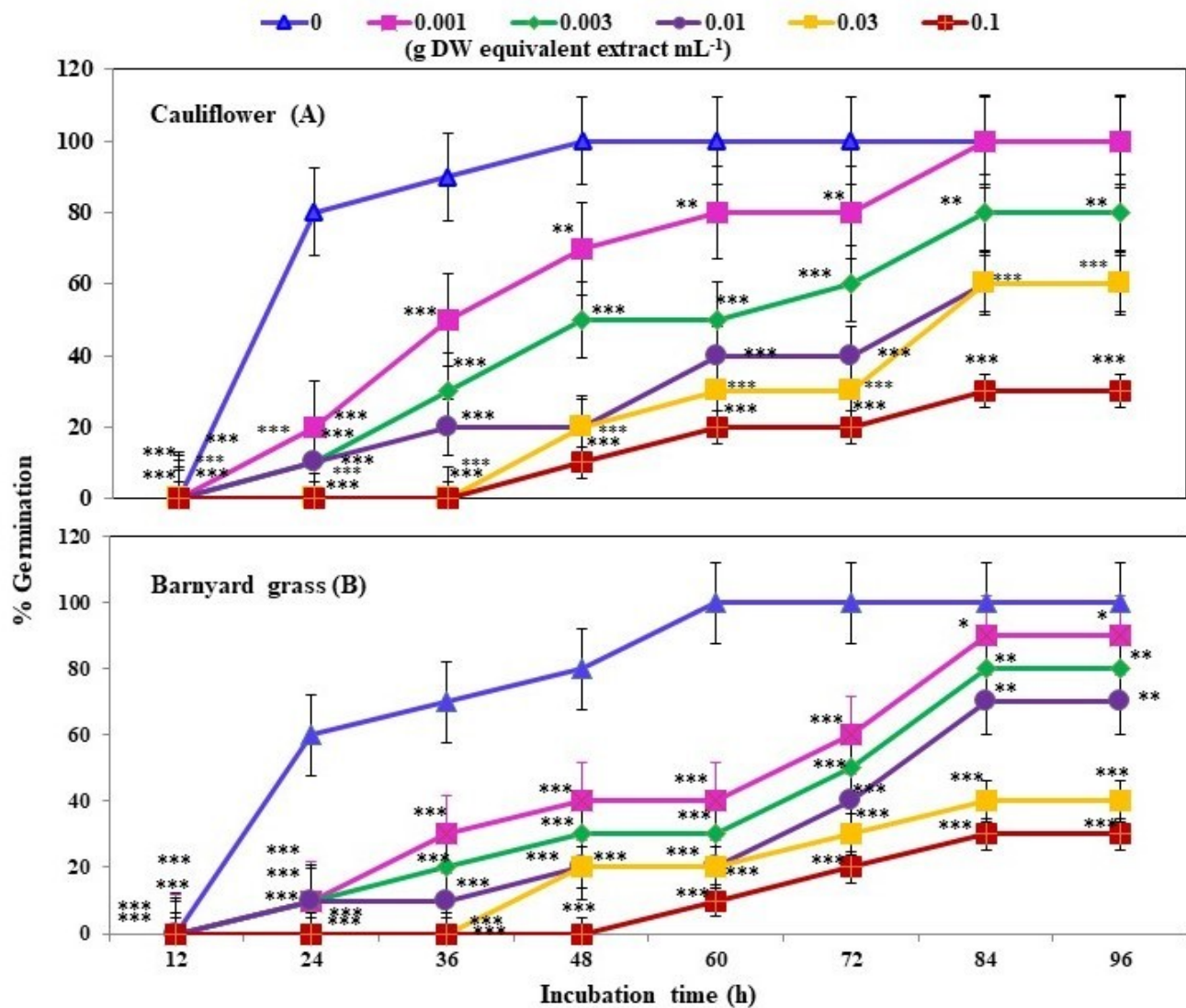


Fig. 1. Effect of aqueous methanol extracts of *J. adhatoda* L. leaves on the germination of (A) Cauliflower (B) Barnyard grass at 12 hr intervals for 96 hr of incubation in darkness at 25 °C in the laboratory. Means  $\pm$  SE from 3 independent experiments with 3 replicate Petri dishes for each treatment (n=90). Significant differences between control and treatment are represented by \* $p < 0.05$ , \*\* $p < 0.01$  and \*\*\* $p < 0.001$ , respectively.

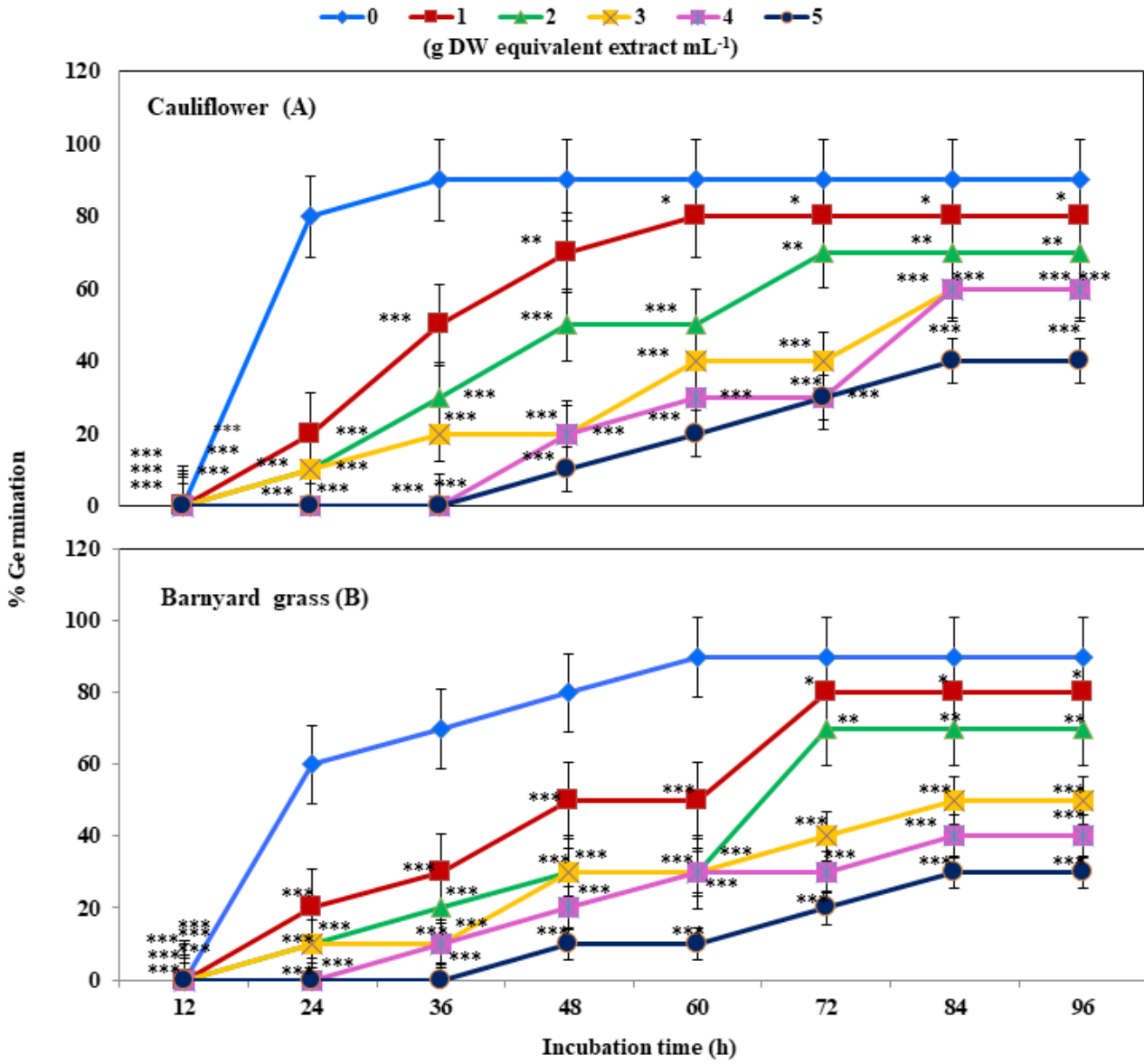
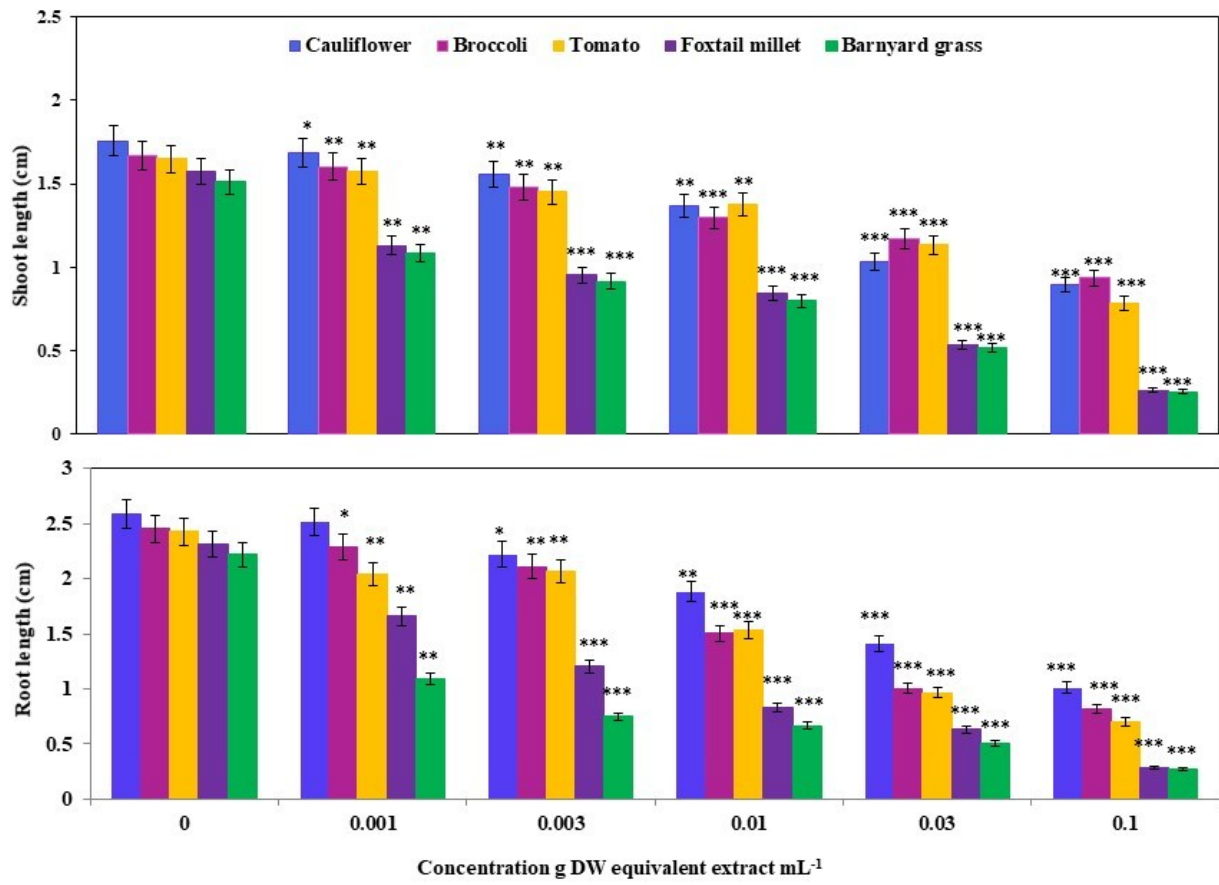


Fig. 2. Effect of aqueous extracts of *J. adhatoda* L. leaves on the germination of cauliflower at 12 hr intervals for 96 hr in pot experiment. Means  $\pm$  SE from 3 independent experiments with 3 replicate Petri dishes for each treatment (n=90). Significant differences between control and treatment are represented by \* $p < 0.05$ , \*\* $p < 0.01$  and \*\*\* $p < 0.001$ , respectively.



**Fig. 3.** Effect of aqueous methanol extracts of *J. adhatoda* L. leaves on the shoot and root length of three crops (cauliflower, broccoli, and tomato) and two weed species (foxtail millet and barnyard grass). Means  $\pm$  SE from 3 independent experiments with 3 replicate Petri dishes for each treatment (n=90). Significant differences between control and treatment are represented by \* $p < 0.05$ , \*\* $p < 0.01$  and \*\*\* $p < 0.001$ , respectively.

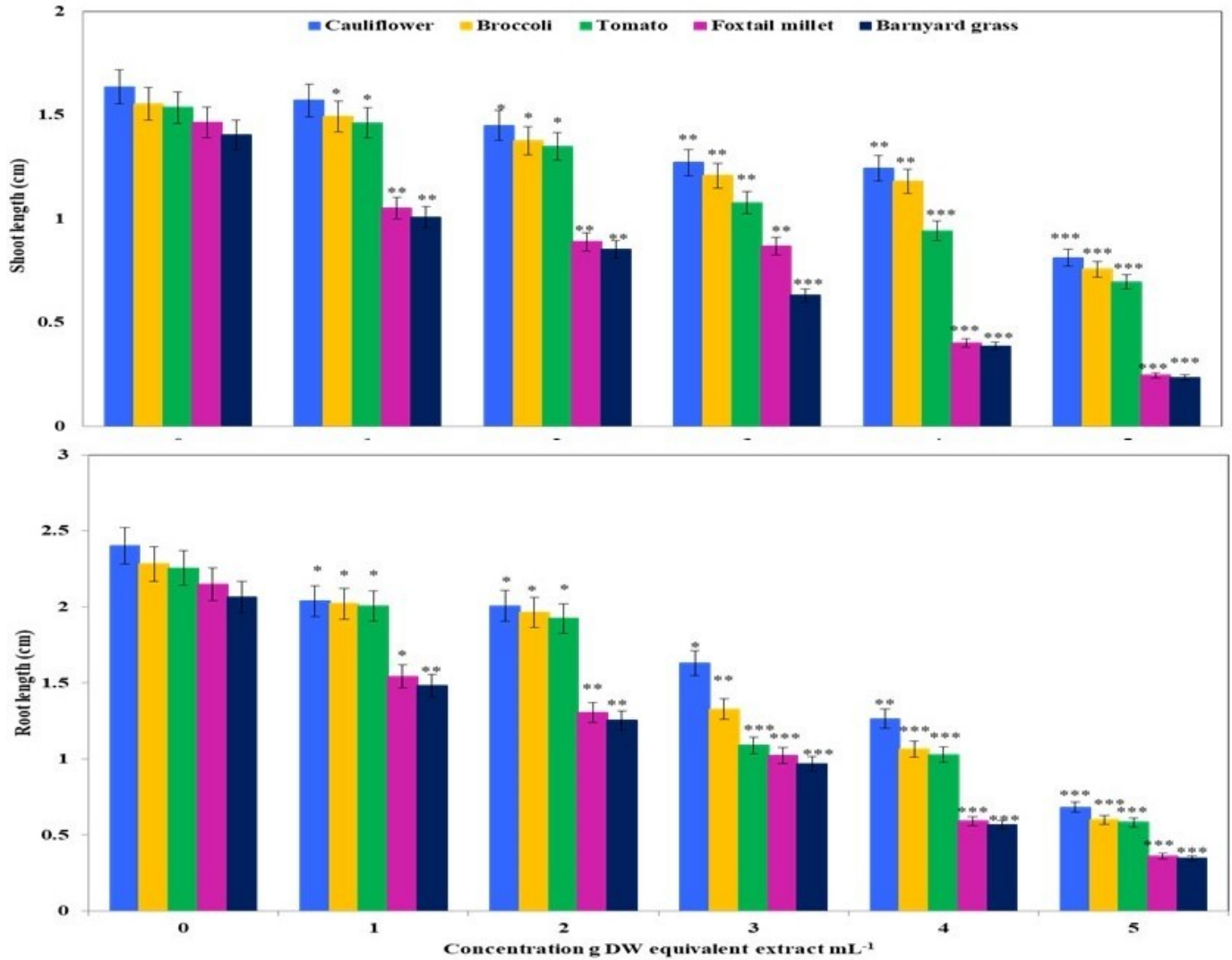


Fig. 4. Effect of aqueous methanol extracts of *J. adhatoda* L. leaves on the shoot and root length of three crops (cauliflower, broccoli, and tomato) and two weed species (foxtail millet and barnyard grass) in pot experiment. Shoot length was checked after 48 h of incubation in darkness at 25 °C. Means  $\pm$  SE from 3 independent experiments with 3 replicate Petri dishes for each treatment (n=90). Significant differences between control and treatment are represented by \* $p < 0.05$ , \*\* $p < 0.01$  and \*\*\* $p < 0.001$ , respectively.

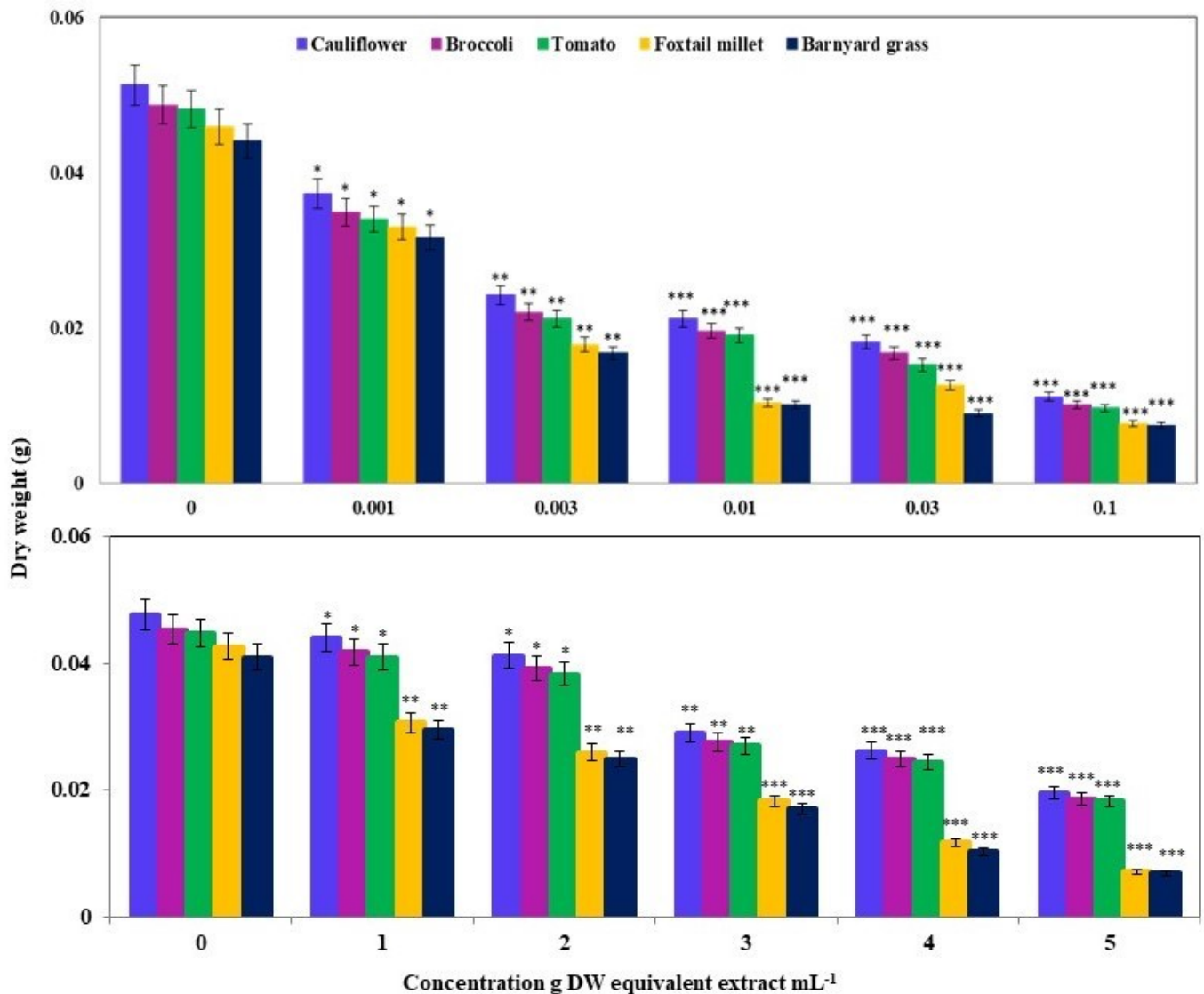


Fig. 5. Effect of aqueous methanol and aqueous extracts of *J. adhatoda* L. leaves on the shoot dry weight (DW) and root dry weight (DW) of three crops (cauliflower, broccoli and tomato) and two weed species (foxtail millet and barnyard grass) in the laboratory and pot experiment. Means  $\pm$  SE from 3 independent experiments with 3 replicate Petri dishes for each treatment (n=90). Significant differences between control and treatment are represented by \* $p < 0.05$ , \*\* $p < 0.01$  and \*\*\* $p < 0.001$ , respectively.

#### Supplementary Tables

**Table 1.** Correlation between concentrations of the extract obtained from *Justicia adhatoda* L. leaves and shoot and root length of all the test species in the laboratory

Test Species	Correlation Co-efficient (R)	
	Shoot	Root
Cauliflower	-0.854***	-0.853***
Broccoli	-0.886***	-0.922***
Tomato	-0.948***	-0.883***
Foxtail millet	-0.812***	-0.788***
Barnyard grass	-0.811***	-0.792***

\*\*\*Indicates significance of correlation at  $p < 0.001$

**Table 2.** Correlation between concentrations of the extract obtained from *Justicia adhatoda* L. leaves and shoot and root length of all the test species in pot experiment

Test Species	Correlation Co-efficient (R)	
	Shoot	Root
Cauliflower	-0.946***	-0.973***
Broccoli	-0.943***	-0.979***
Tomato	-0.984***	-0.969***
Foxtail millet	-0.973***	-0.990***
Barnyard grass	-0.990***	-0.991***

\*\*\*Indicates significance of correlation at  $p < 0.001$