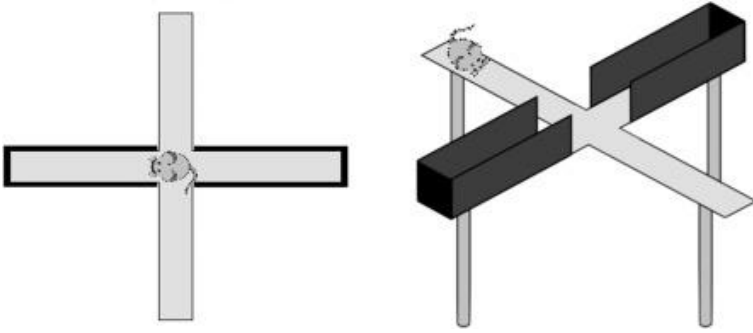




**Supplementary Figure 1.** *Leea aequata* in its natural habitat.



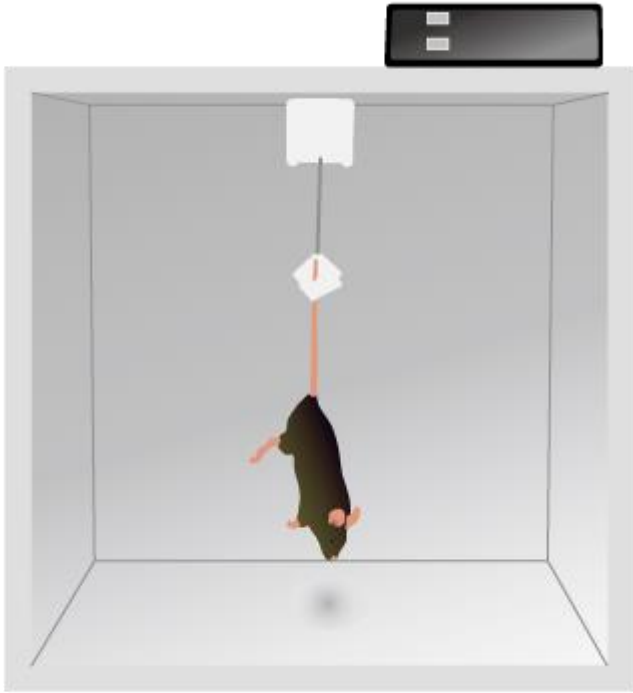
**Supplementary Figure 2.** Elevated Plus Maze apparatus used in anxiolytic activity.



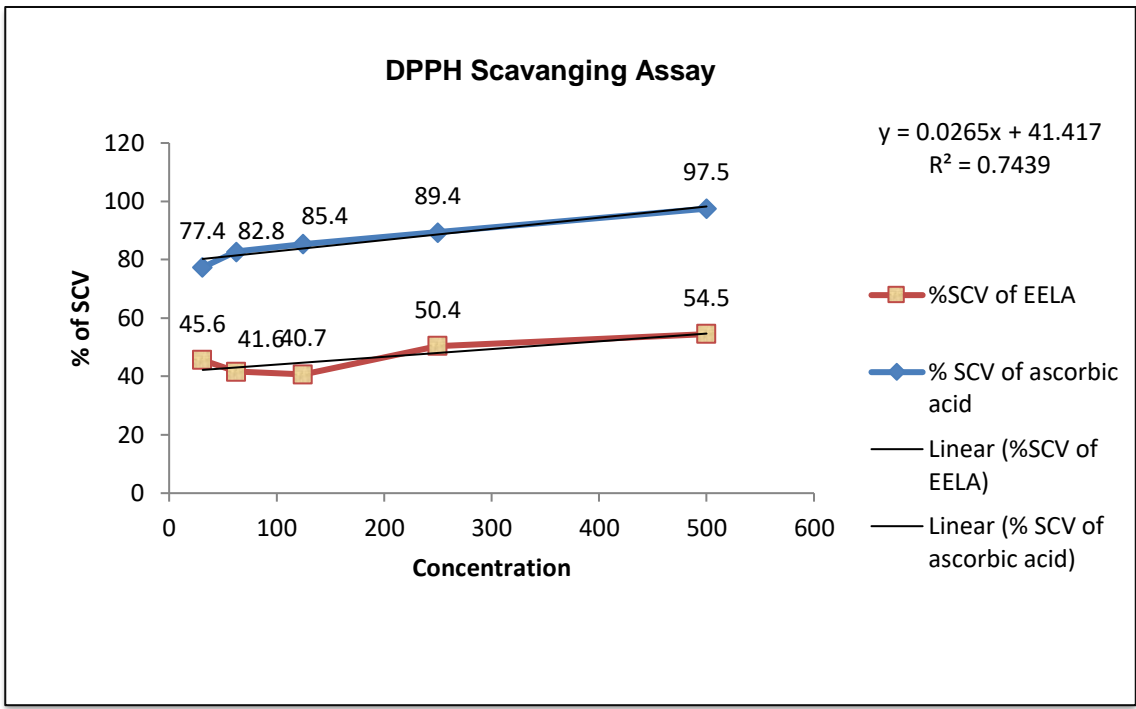
**Supplementary Figure 3.** Hole Board Test apparatus used in anxiolytic activity.



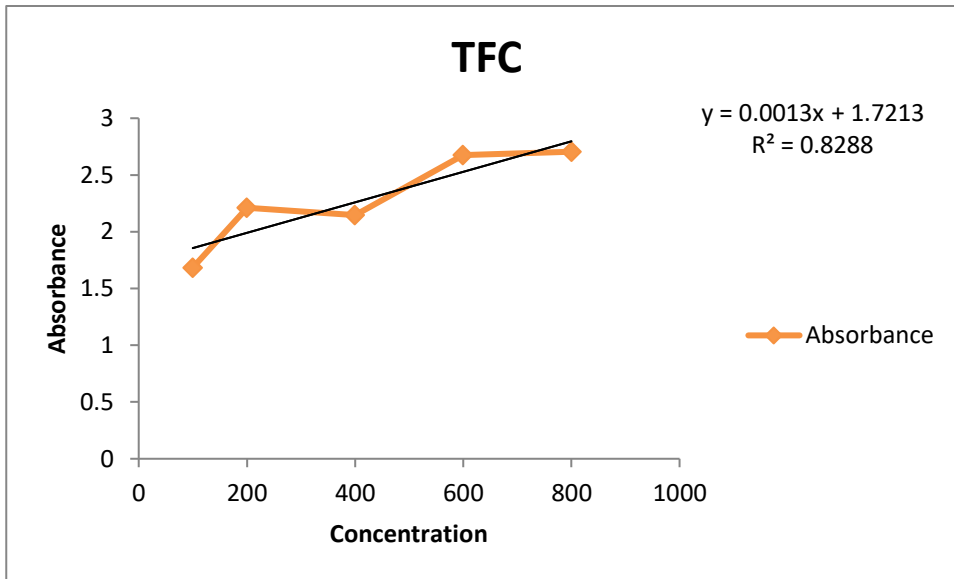
**Supplementary Figure 4.** Apparatus used in Forced Swimming Test, which measures the antidepressant activity of crude extract.



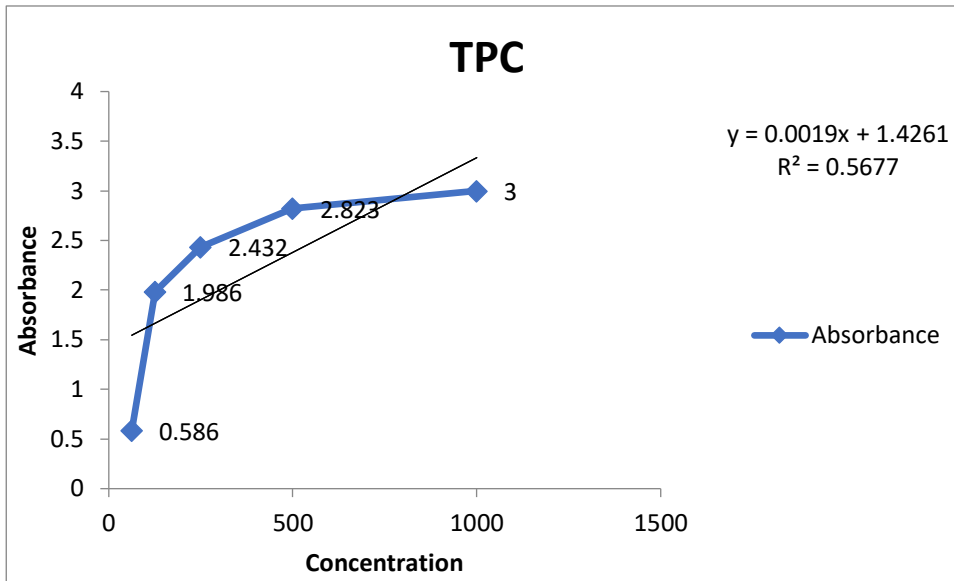
**Supplementary Figure 5.** Apparatus used in Tail Suspension Test, which measures the antidepressant activity of crude extract.



**Supplementary Figure 6.** DPPH radical scavenging activity of ascorbic acid and Ethanolic Extract of *L. aequata* (EELA) at different concentrations.

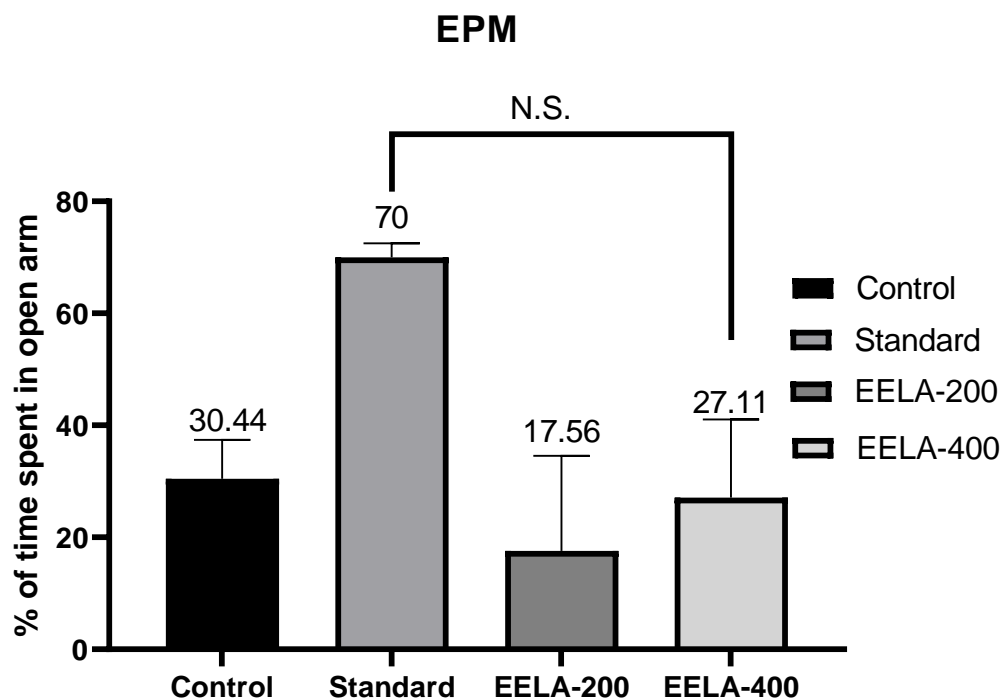


**Supplementary Figure 7.** Determination of Total Flavonoid Content (TFC) using quercetin calibration curve.



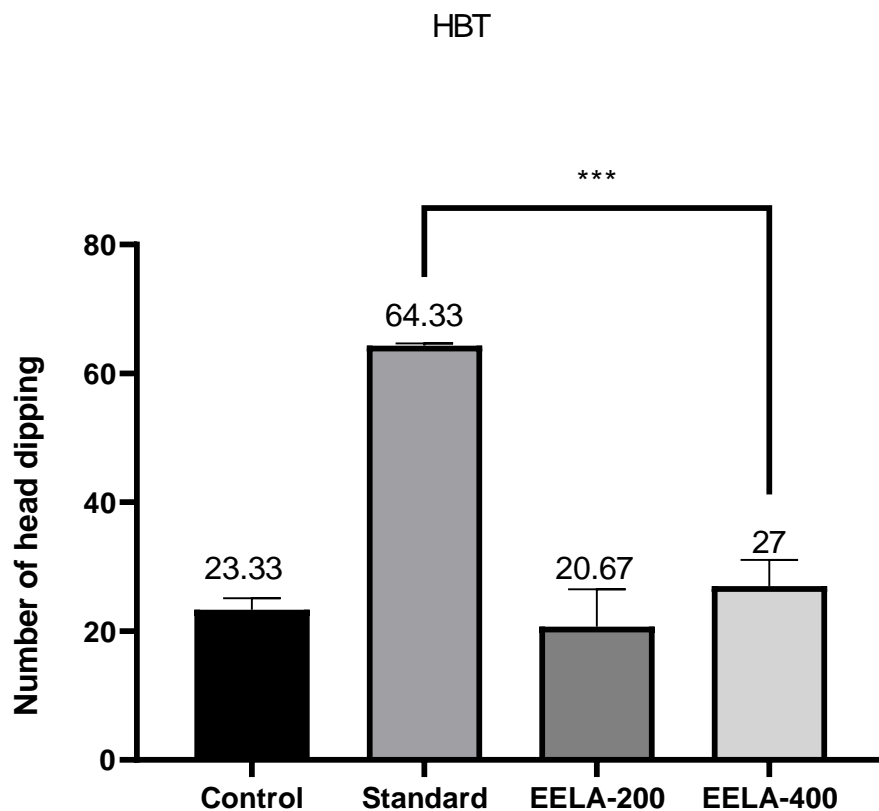
**Supplementary Figure 8.** Determination of Total Phenolic Content (TPC) from gallic acid calibration curve.





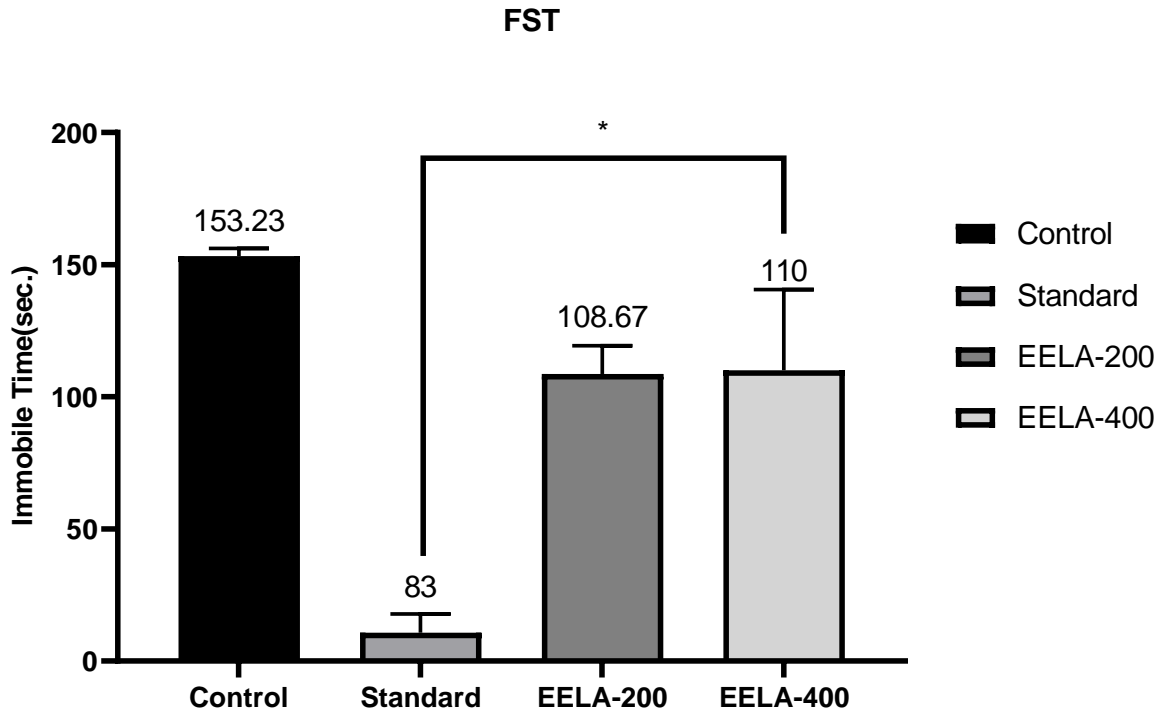
**Supplementary Figure 9.** Anxiolytic activity of Ethanolic Extract of *L. aequata* (EELA) on the Elevated Plus Maze test in mice. All values are presented as mean  $\pm$  Standard Error of the Means (SEM). To compare the test samples with the control, a one-way Analysis of Variance (ANOVA) was used, followed by Dunnett's test (n=3, per group).

NS, Not Significant; \*\*p<0.01; \*\*\*p<0.001, significantly different from control.



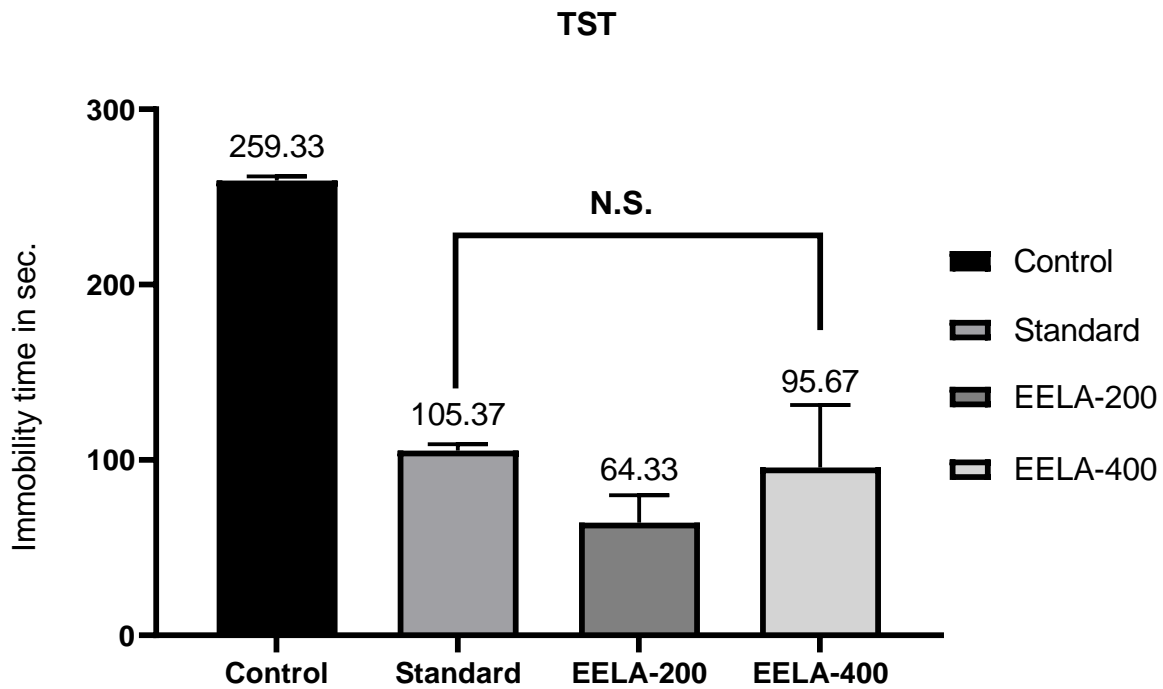
**Supplementary Figure 10.** Anxiolytic activity of Ethanolic Extract of *L. aequata* (EELA) on the Hole Board Test in mice. All values are presented as mean  $\pm$  Standard Error of the Means (SEM). To compare the test samples with the control, a one-way Analysis of Variance (ANOVA) was used, followed by a Dunnett's test (n=3, per group).

NS, Not Significant; \*\*p<0.01; \*\*\*p<0.001; \*\*\*\*p<0.0001, significantly different from control.



**Supplementary Figure 11.** Anti-depressant activity of Ethanolic Extract of *L. aequata* (EELA) on the Forced Swim Test in mice. All values are presented as mean  $\pm$  Standard Error of the Means (SEM). To compare the test samples with the control, a one-way Analysis of Variance (ANOVA) was used, followed by a Dunnett's test (n=3, per group).

NS, Not Significant; \*p<0.1; \*\*p<0.01; \*\*\*p<0.001; \*\*\*\*p<0.0001, significantly different from control.



**Supplementary Figure 12.** Anti-depressant activity of Ethanolic Extract of *L. aequata* (EELA) on the Tail Suspension Test in mice. All values are presented as mean  $\pm$  Standard Error of the Means (SEM). To compare the test samples with the control, a one-way Analysis of Variance (ANOVA) was used, followed by a Dunnett's test (n=3, per group).

NS, Not Significant; \*p<0.1; \*\*p<0.01; \*\*\*p<0.001; \*\*\*\*p<0.0001, significantly different from control.