

Supporting Info

Glyphosate Interaction with eEF1 α 1 Indicates Altered Protein Synthesis: Evidence for Reduced Spermatogenesis and Cytostatic Effect

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Materials and Methods

Table S1. Criteria for Assessment of the Spermatogenic Index

Stage	Morphologic hallmarks
1	Only spermatogonia present
2	Spermatogonia and spermatocytes present
3	Spermatogonia, spermatocytes, and round (early) spermatids present with less than 5 late spermatids per tubule
4	Spermatogonia, spermatocytes, and round spermatids present with up to 25 late spermatids per tubule
5	All cell types present with 50–75 late spermatids per tubule
6	All cell types present with more than 75 late spermatids per tubule

Results

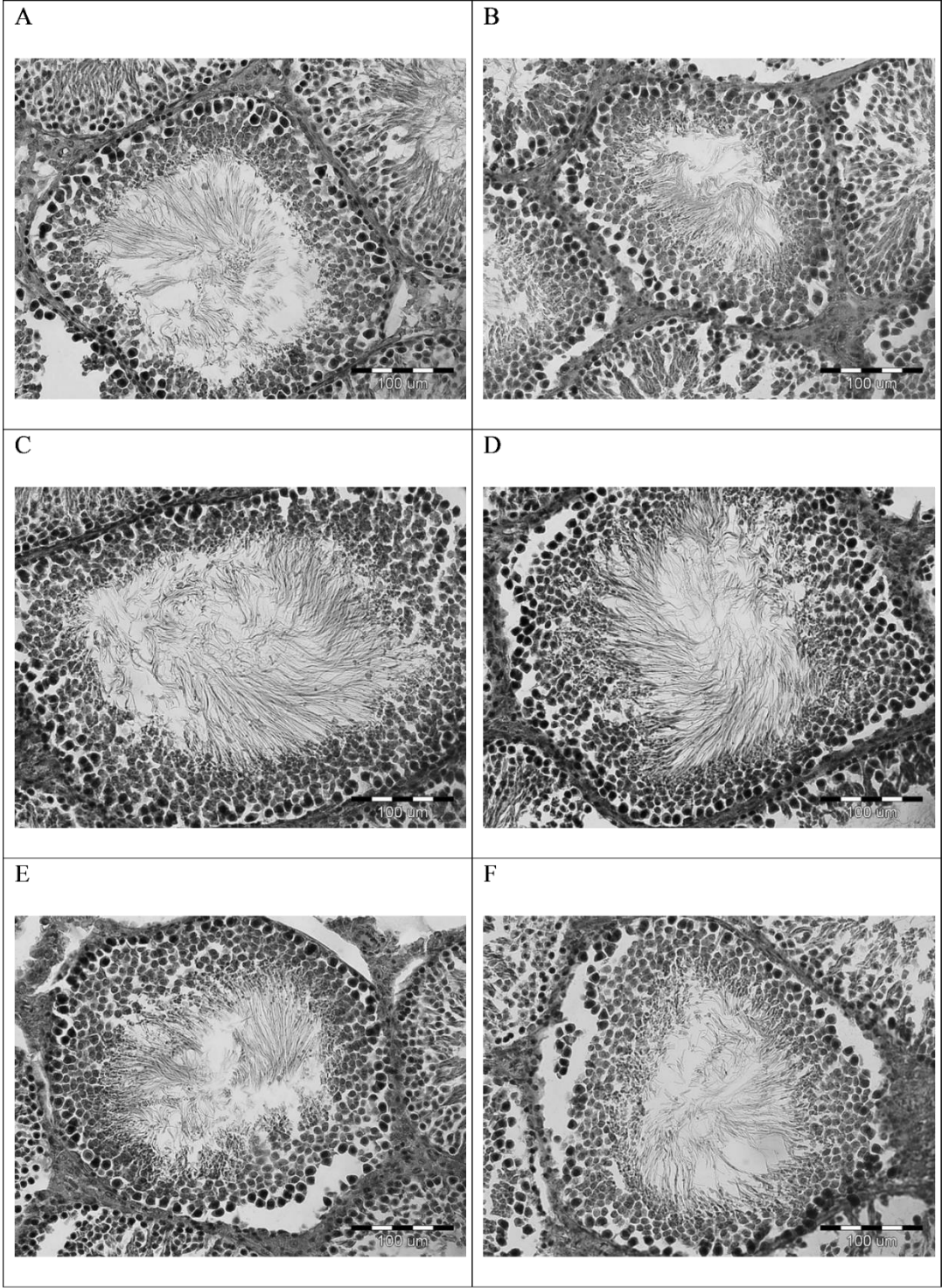


Figure S1. Representative microphotographs of rat testes tissue. (A–B) Control, (C–D) 0.7 mg/L glyphosate, and (E–F) 7 mg/L glyphosate. No unripe sperm cells were observed in the treatments (C–F).

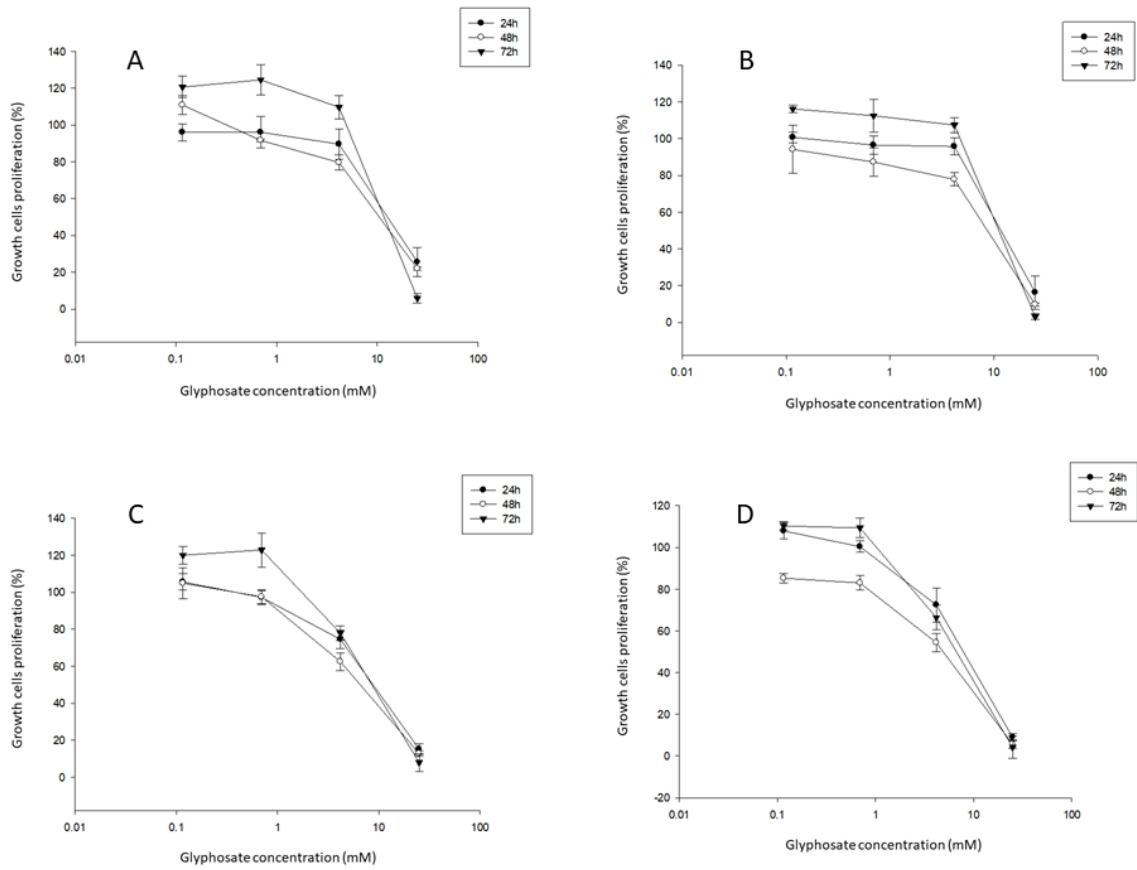


Figure S2. The proliferation of GC-1 and SUP-B15 cells analyzed by WST-1 assay. The proliferation was measured after 24-, 48- and 72-hours incubation of cells in glyphosate. (A) GC-1, 1-hour incubation period, (B) GC-1, 2-hours incubation period, (C) SUP-B15, 1-hour incubation period, (D) SUP-B15, 2-hours incubation period.

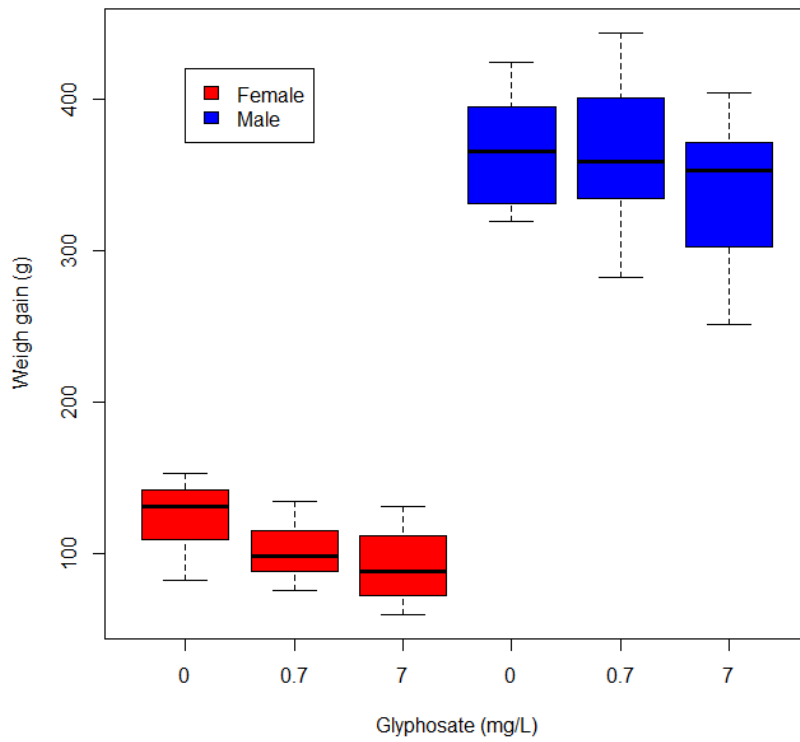


Figure S3. Average weight gain differences among treatments. The differences were significant for female ($p=0.005$) but not for male ($p=0.088$) rats.