

Figure S1. Effects of dietary bean on gene expression involved in triacylglycerol metabolism in both female and male mice. Differential expression analysis performed in CLC Genomic Workbench. * p -value < 0.05; ** p -value < 0.01; *** p -value < 0.001; **** p -value < 0.0001

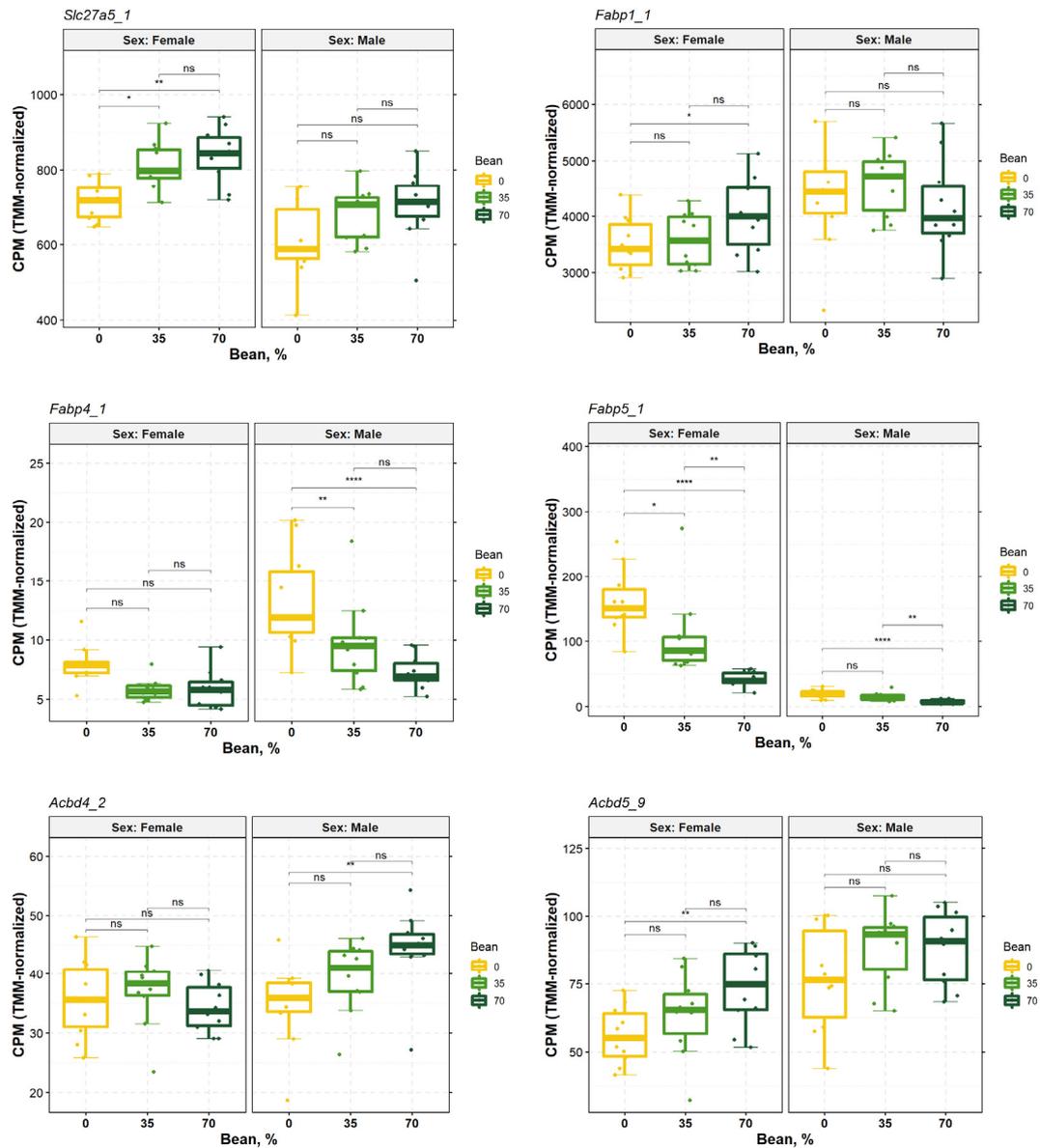


Figure S2. Dietary bean effects on expression of hepatic fatty acid transport genes in female and male mice. Differential expression analysis performed in CLC Genomic Workbench. * p -value < 0.05; ** p -value < 0.01; *** p -value < 0.001; **** p -value < 0.0001

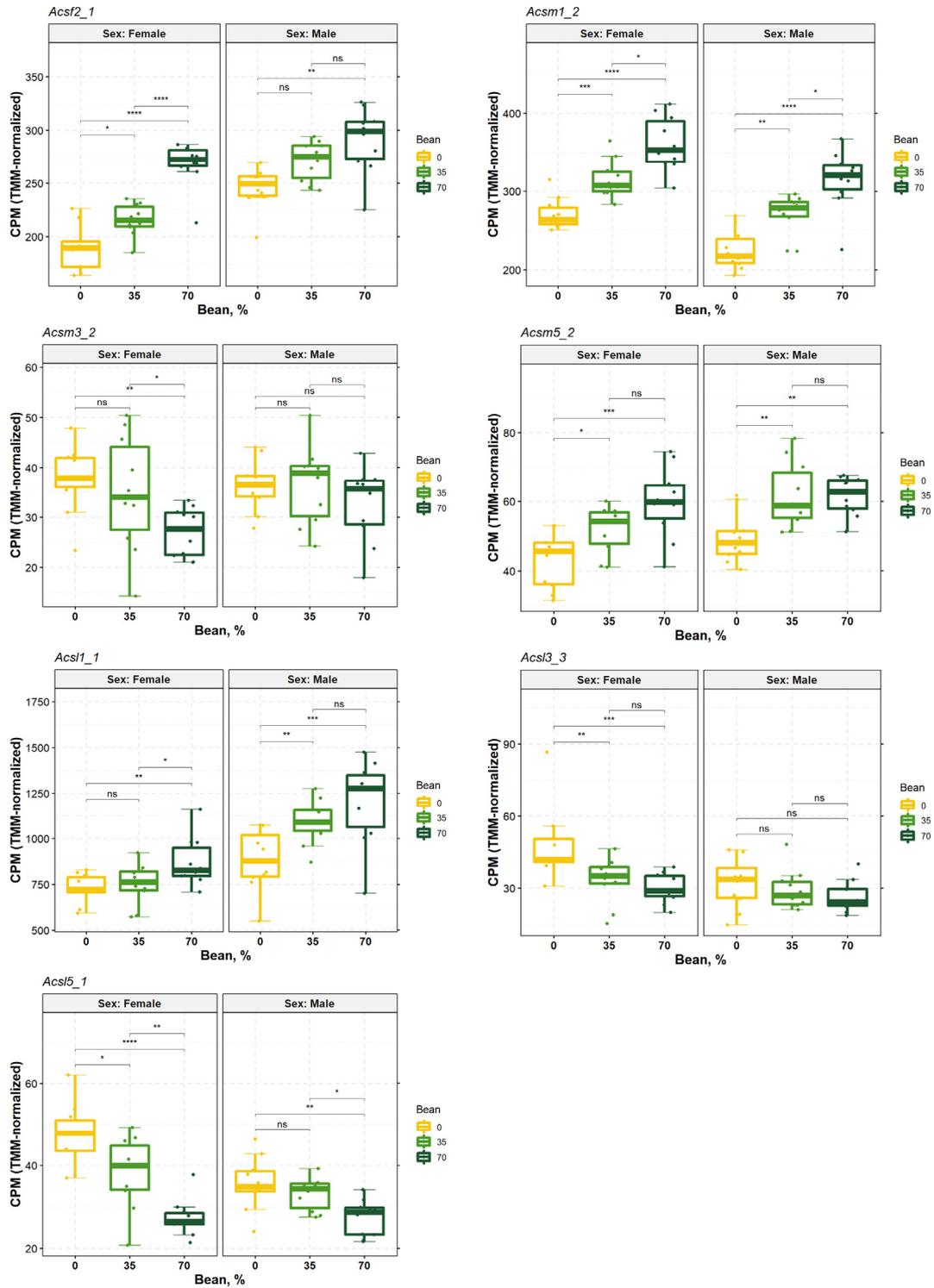
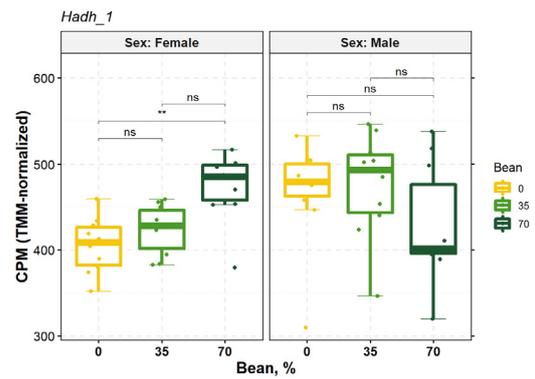
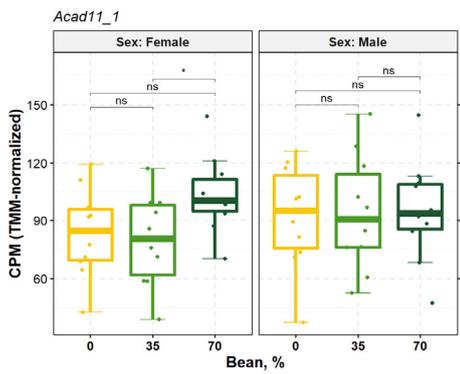
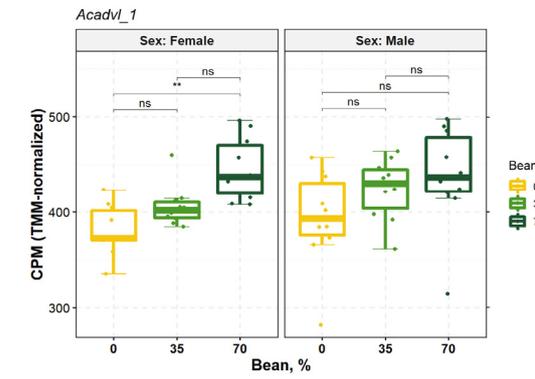
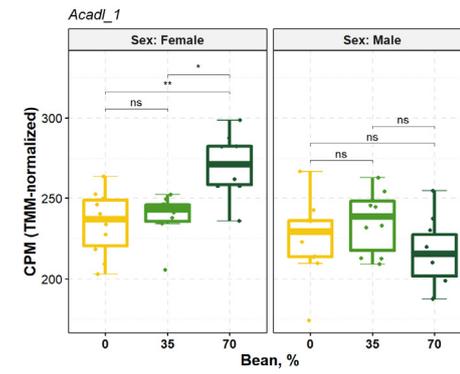
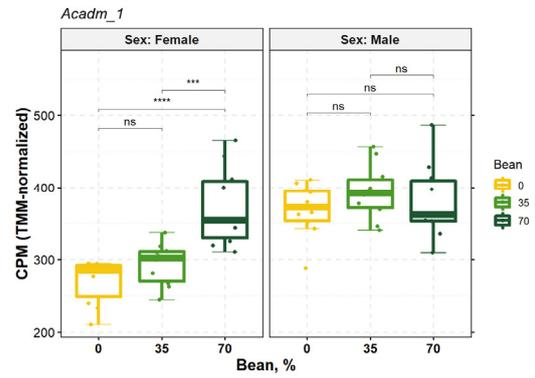
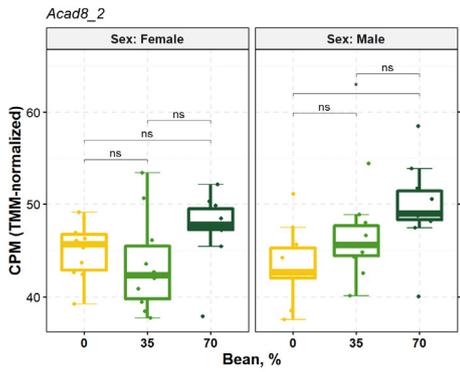
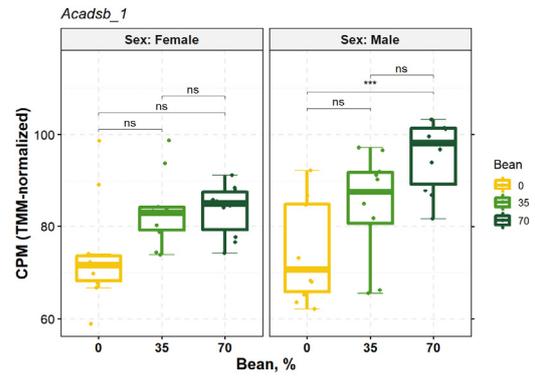
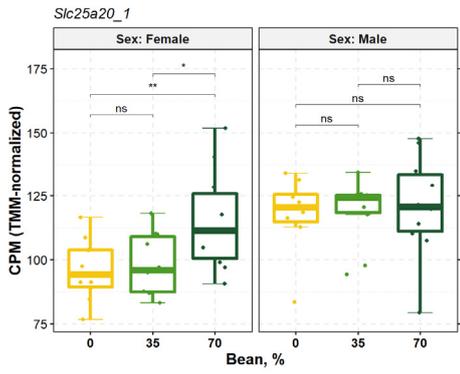


Figure S3. Dietary bean dose-dependently affects expression of acyl-CoA synthetases in the livers of female and male mice. Differential expression analysis performed in CLC Genomic Workbench. * p -value < 0.05; ** p -value < 0.01; *** p -value < 0.001; **** p -value < 0.0001



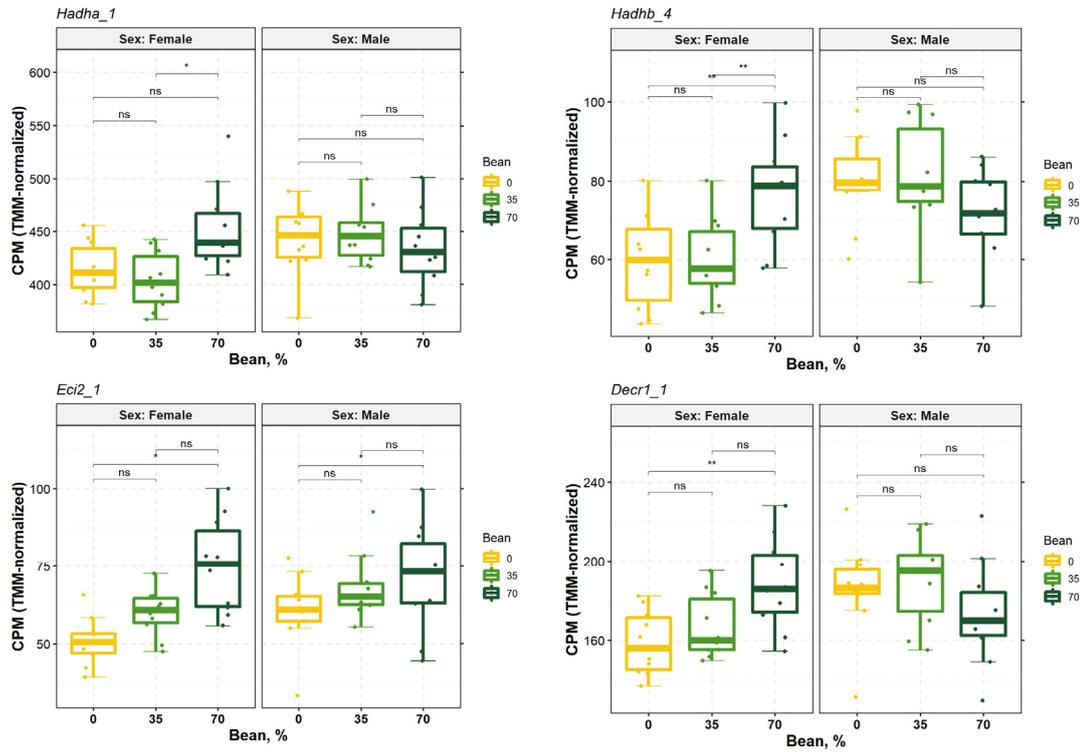


Figure S4. Consumption of beans promotes sex-dependent changes in gene expression regulating mitochondrial β -oxidation in the livers of mice. Differential expression analysis performed in CLC Genomic Workbench. * p -value < 0.05; ** p -value < 0.01; *** p -value < 0.001; **** p -value < 0.0001

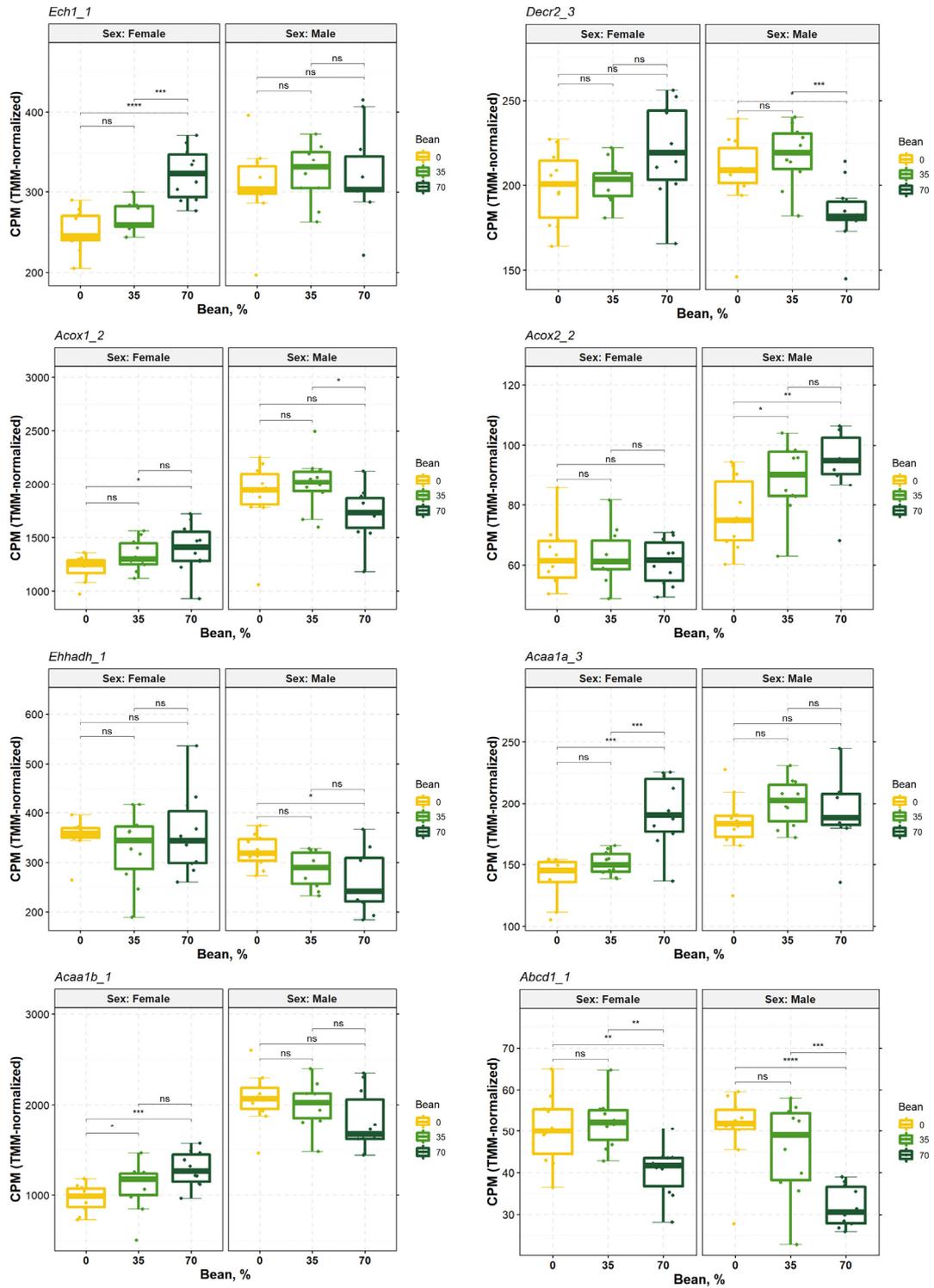


Figure S5. Effects of dietary bean on peroxisomal β -oxidation in the livers of mice. Differential expression analysis performed in CLC Genomic Workbench. * p -value < 0.05; ** p -value < 0.01; *** p -value < 0.001; **** p -value < 0.0001

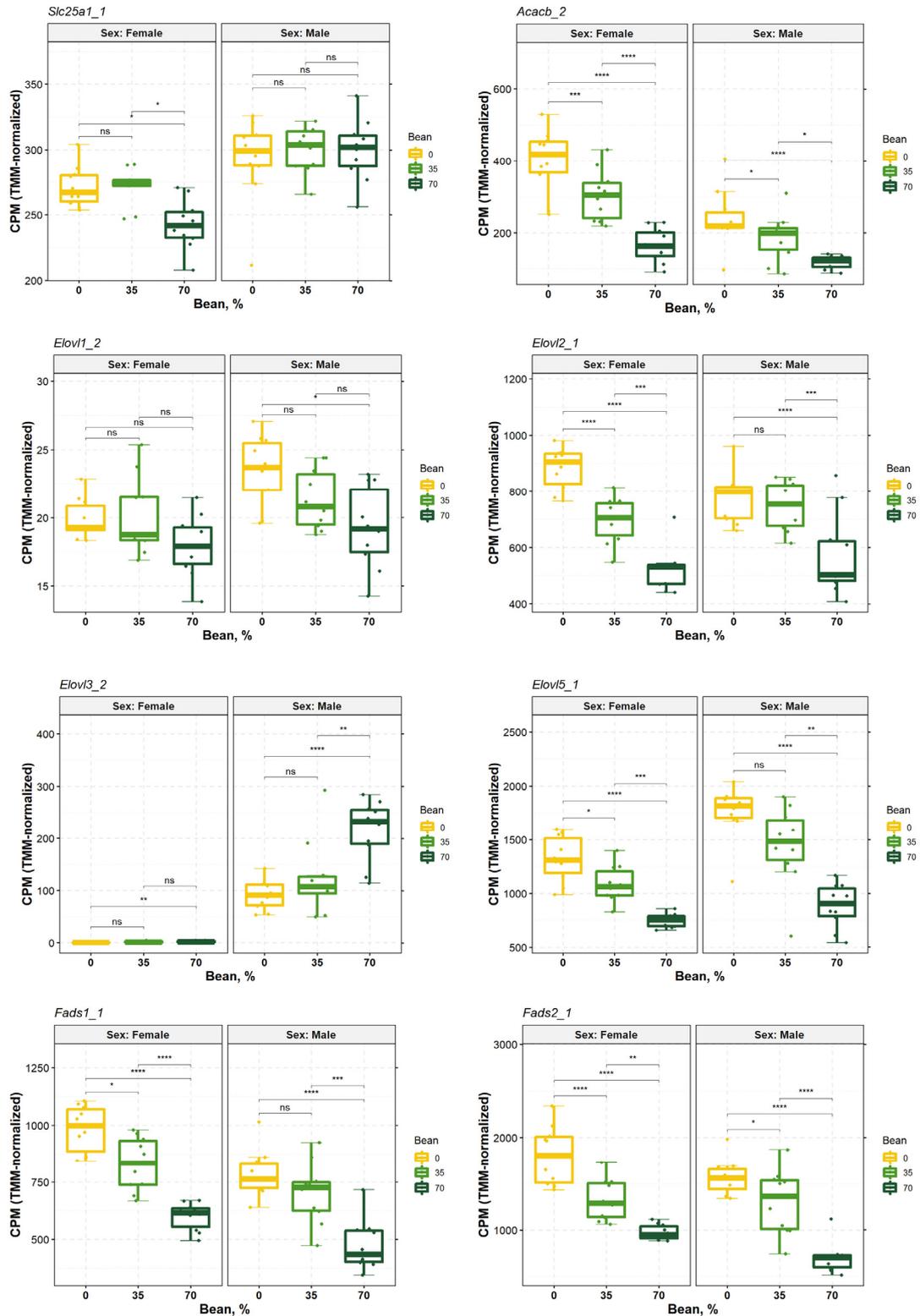
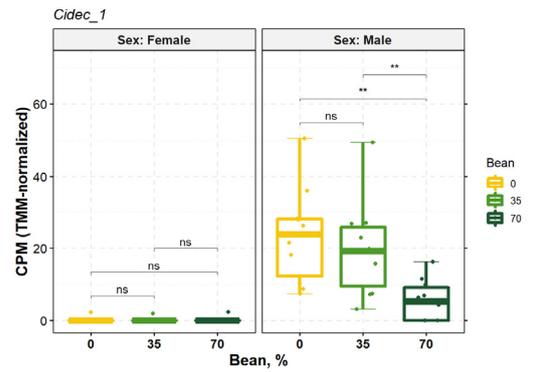
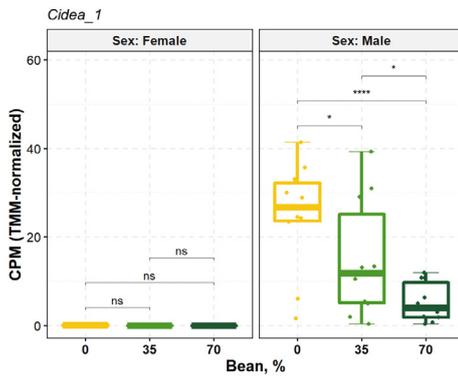
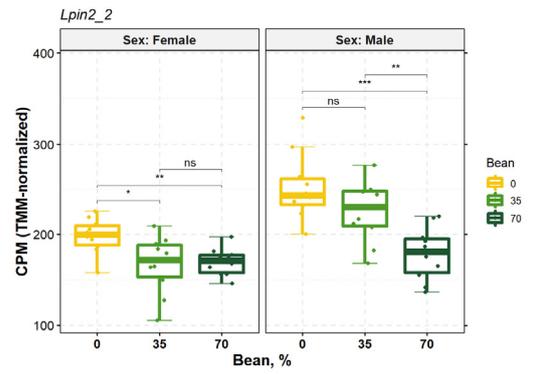
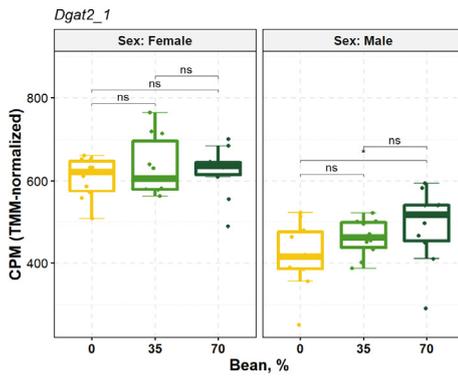
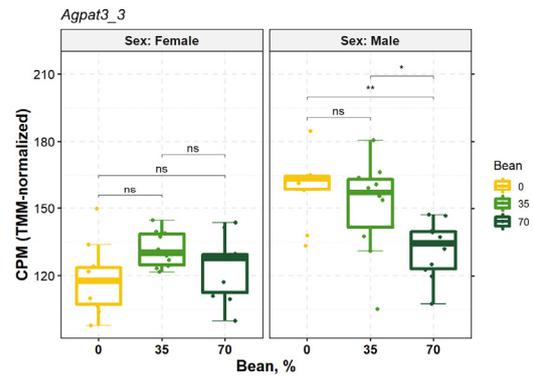
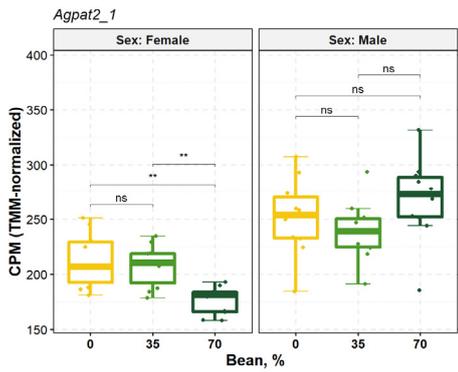
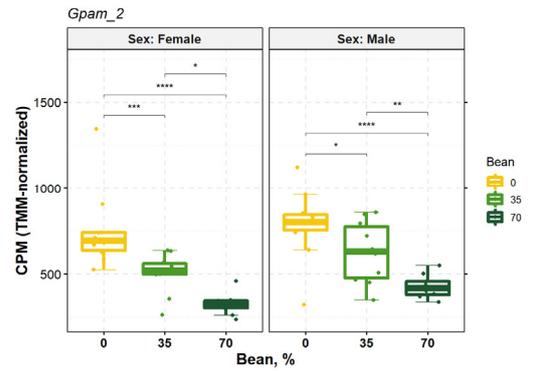
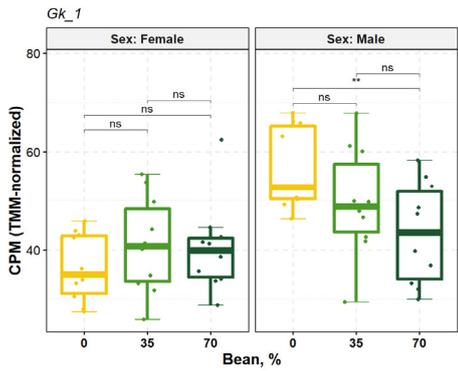
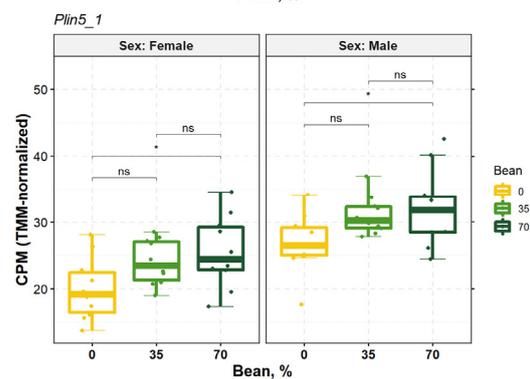
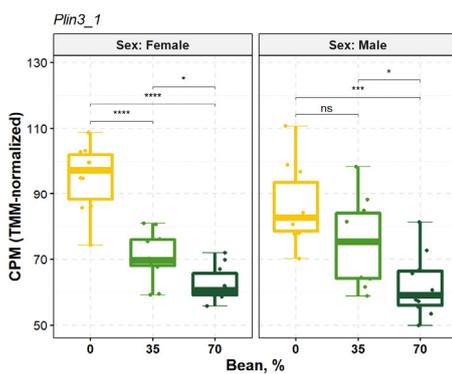
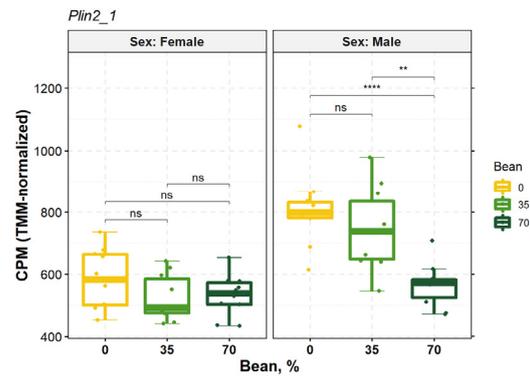
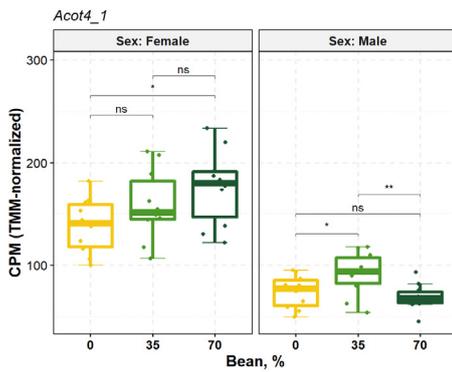
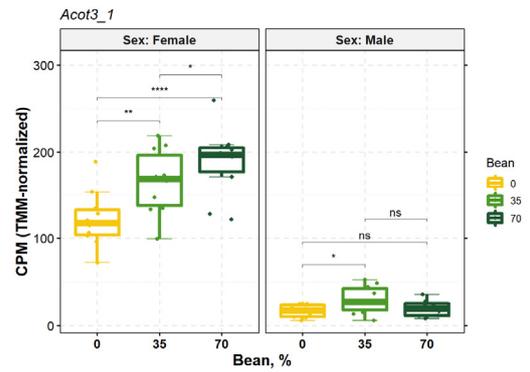
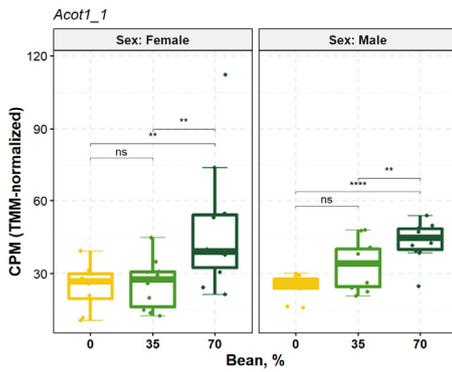
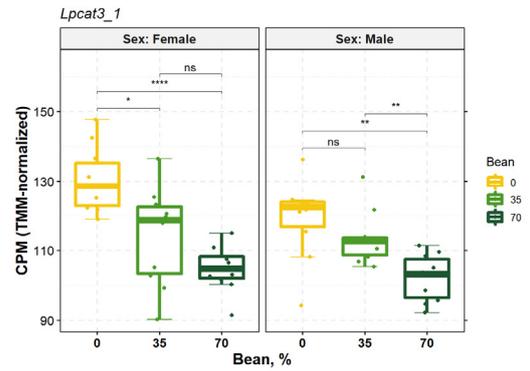
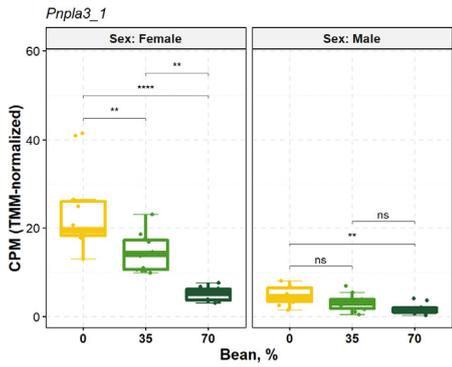


Figure S6. Expression of genes involved in *de novo* lipogenesis in the livers of female and male mice upon consumption of beans. Differential expression analysis performed in CLC Genomic Workbench. * p -value < 0.05; ** p -value < 0.01; *** p -value < 0.001; **** p -value < 0.0001





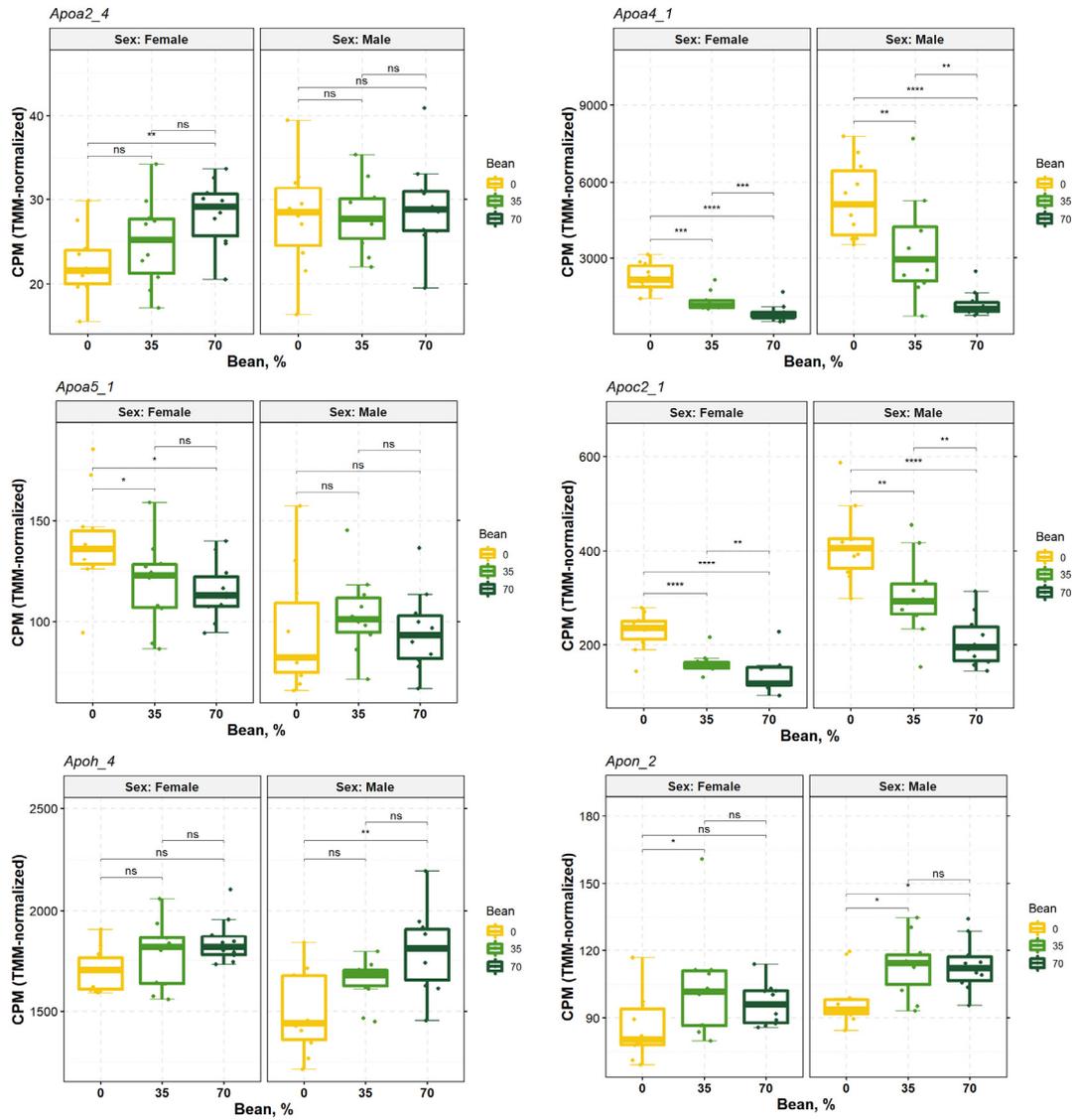
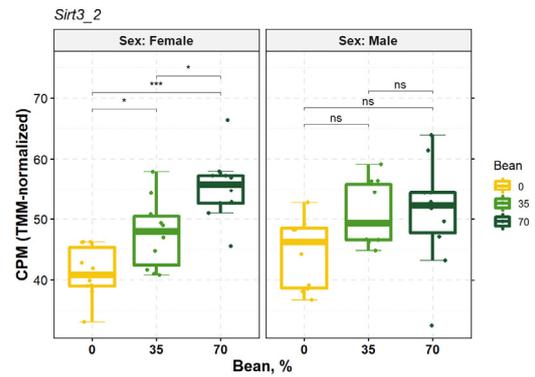
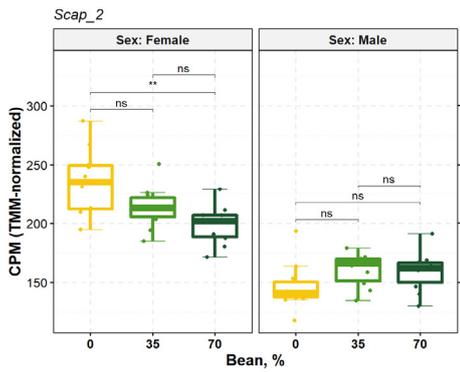
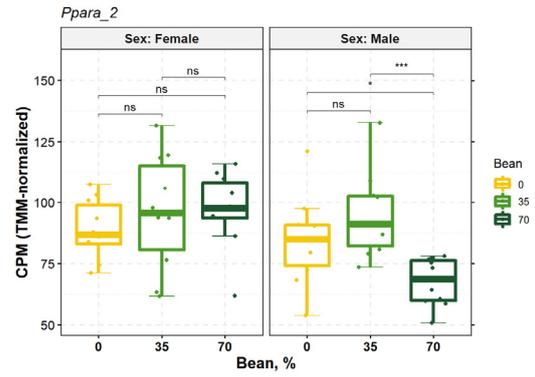
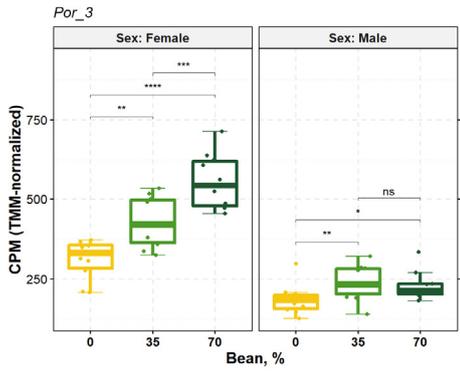
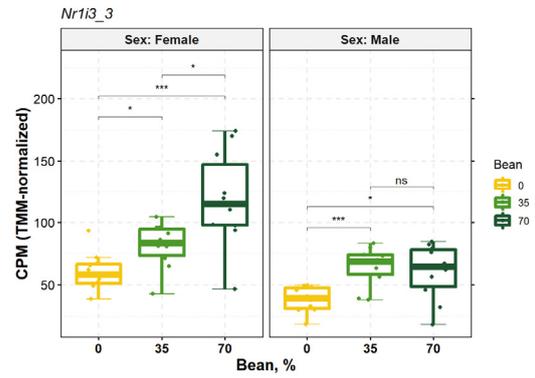
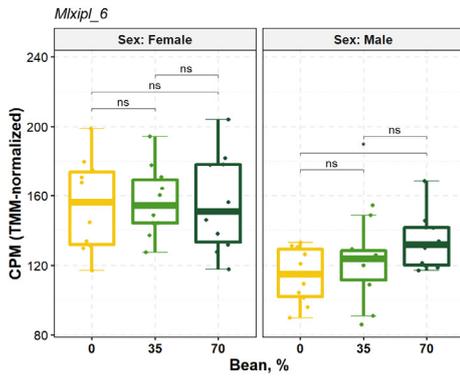
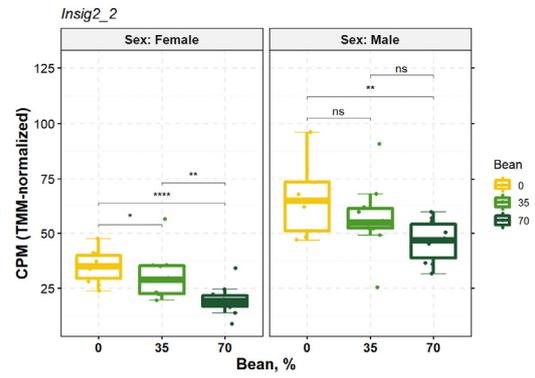
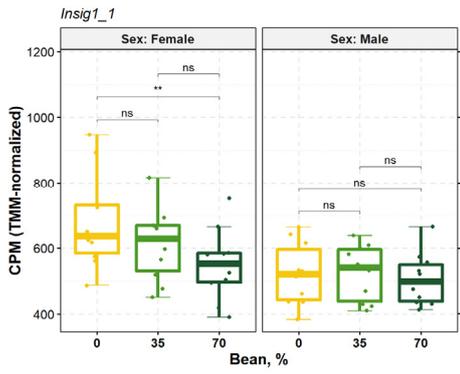


Figure S7. Dietary beans affect expression of genes involved in lipid droplet and lipoprotein formation and clearance in both female and male mice. Differential expression analysis performed in CLC Genomic Workbench. * p -value < 0.05; ** p -value < 0.01; *** p -value < 0.001; **** p -value < 0.0001



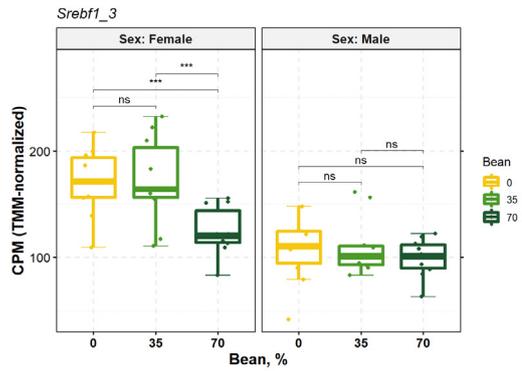


Figure S8. Observed DEGs among the predicted significant upstream regulators. Differential expression analysis performed in CLC Genomic Workbench. * p -value < 0.05; ** p -value < 0.01; *** p -value < 0.001; **** p -value < 0.0001