

MHco3 untreated IVM-S and BZ-S 3 x 20 males 3 x 20 females

## Genetic cross (MHco3 x MHco18) F2 generation



F2CTL untreated IVM-S/R and BZ-S/R 3 x 20 males 3 x 20 females



F2IVM
post ivermectin
IVM-R and BZ-S/R
3 x 20 males
3 x 20 females



F2BZ post fenbendazole IVM-S/R and BZ-R 3 x 20 males 3 x 20 females



MHco18 untreated IVM-R and BZ-R 3 x 20 males 3 x 20 females

В

Pairwise comparison Analysis	MHco18 v MHco3 males	MHco18 v MHco3 females	F2IVM v MHco3 males	F2IVM v MHco3 females	F2IVM v F2CTL males	F2BZ v MHco3 males	F2BZ v MHco3 females	F2BZ v F2CTL males	MHco4 v MHco3 females	MHco10 v MHco3 females
Transcriptomic differences associated with ivermectin resistance	✓	✓	✓	✓	✓	-	-	-	-	-
Differences in gene expression in ivermectin resistant male worms	✓	×	✓	×	✓	-	-	-	-	-
Differences in gene expression in ivermectin resistant female worms	×	✓	×	✓	×	-	-	-	✓	✓
Transcriptomic response to ivermectin exposure	×	×	✓	✓	✓	-	-	-	-	-
Similarities in gene expression with benzimidazole selected populations	✓	✓	✓	✓	✓	✓	✓	✓	-	-
Transcriptomic differences associated with benzimidazole resistance	<b>√</b>	✓	-	-	-	<b>√</b>	<b>√</b>	✓	-	-