Trait: AD_E

Trait: AD−ADBP_E

Trait: AMD_E

Trait: PD−PDBP_E
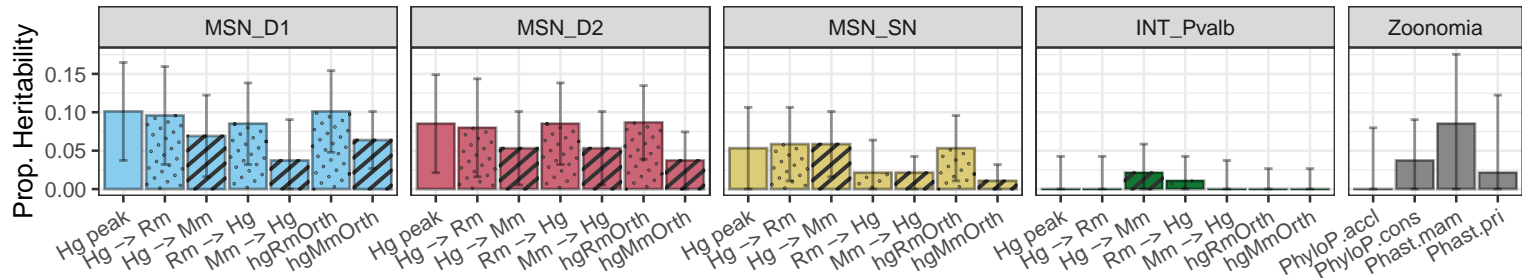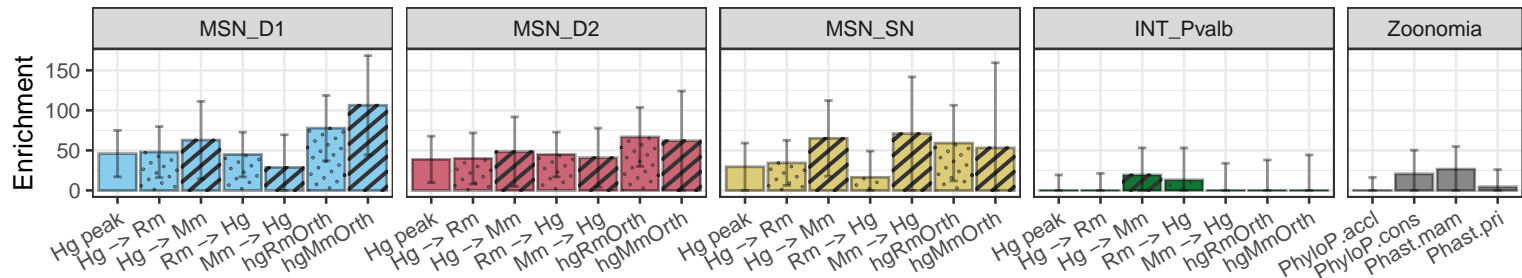
Trait: Cross−Psych_E

Trait: ADHD_E

Trait: Anorexia_E
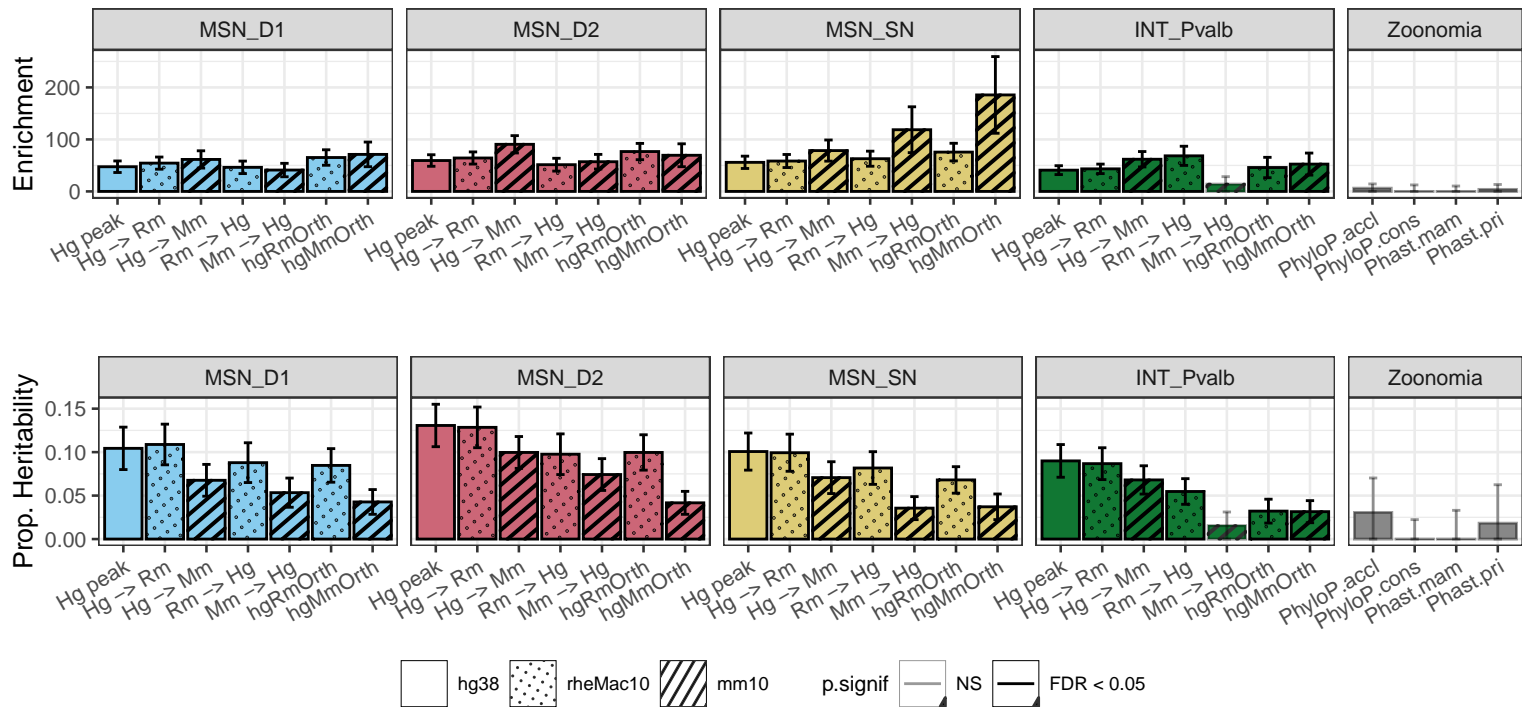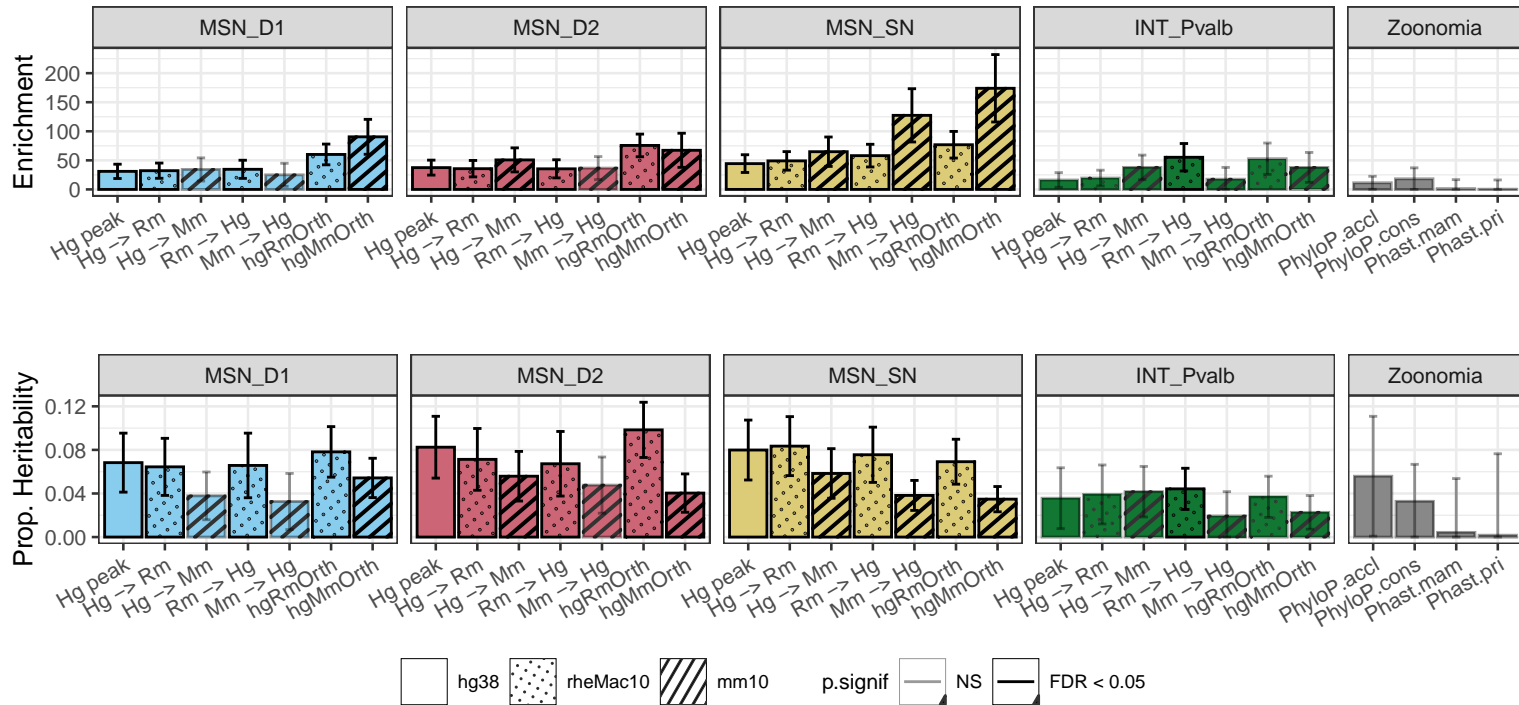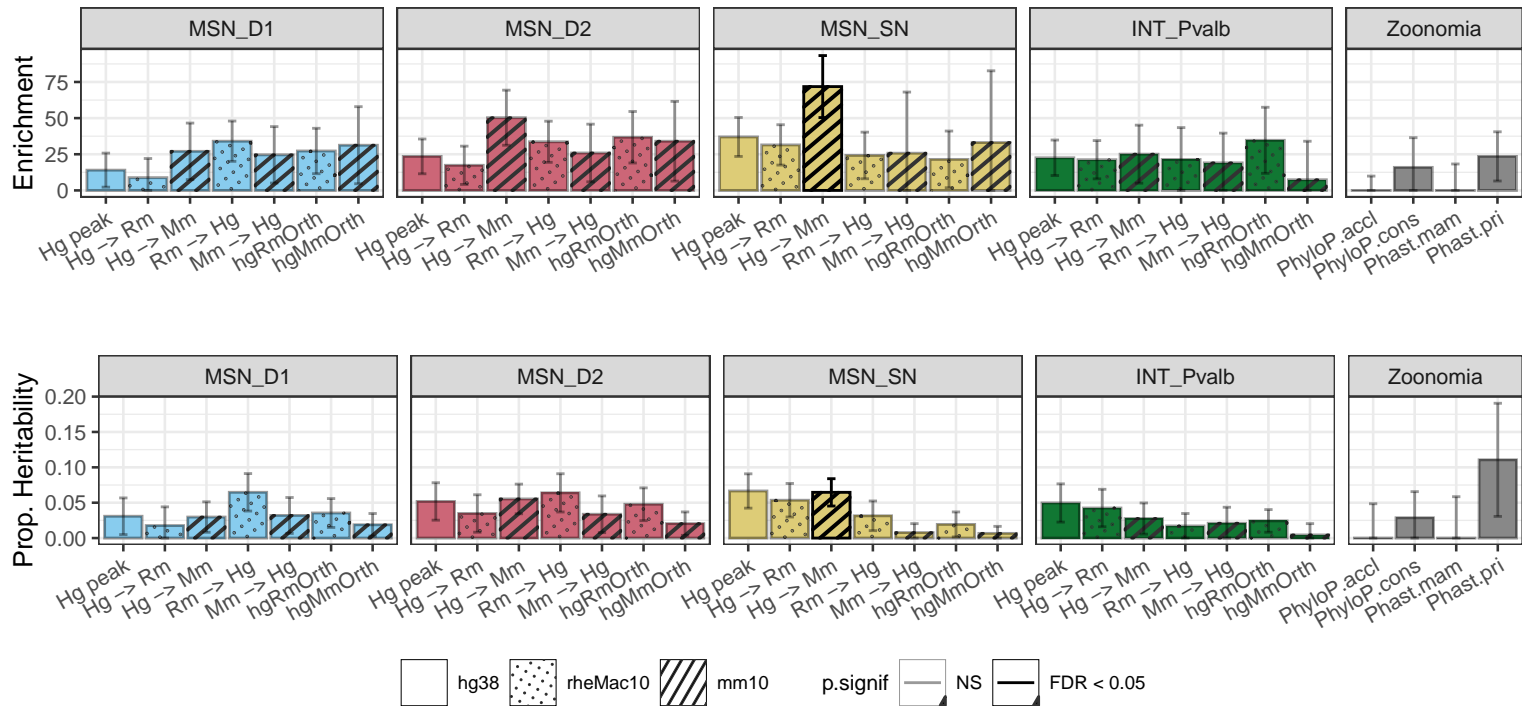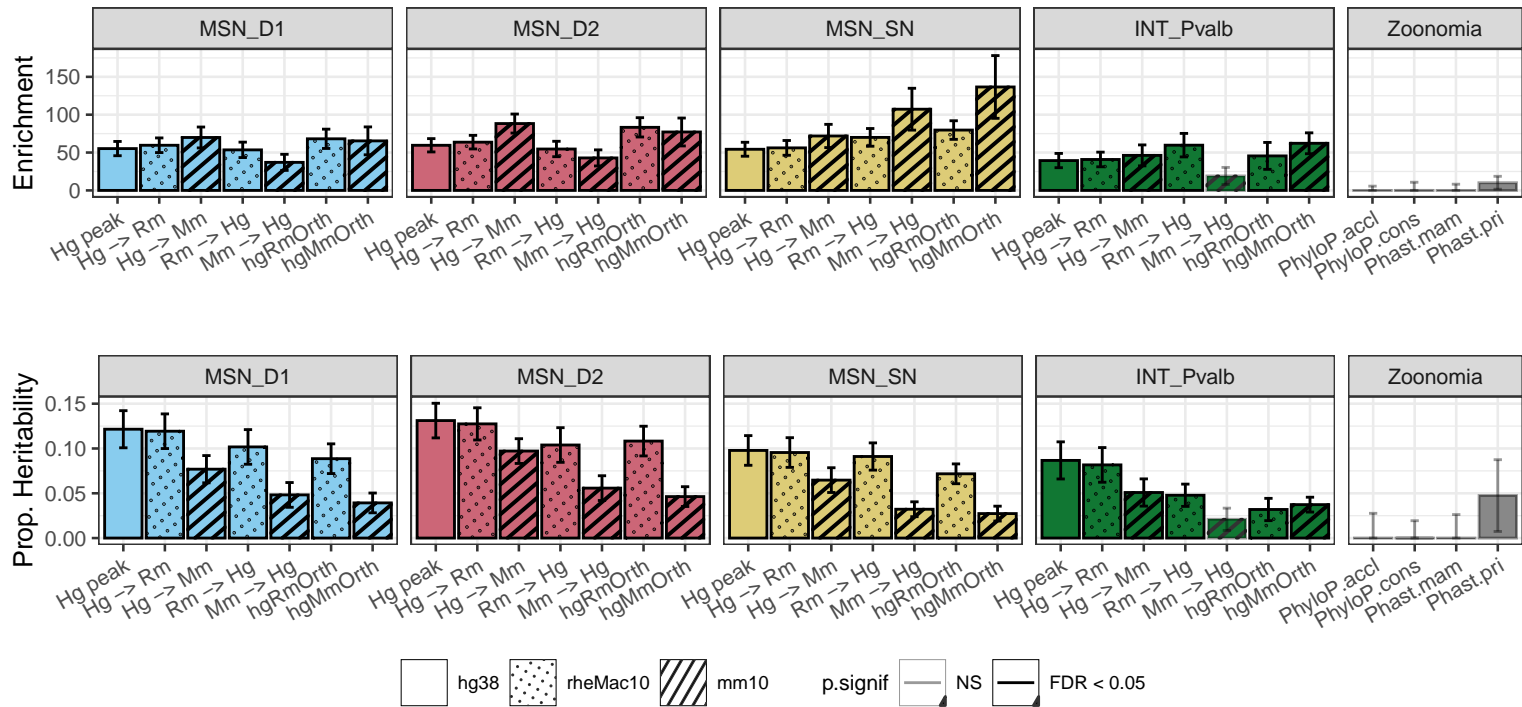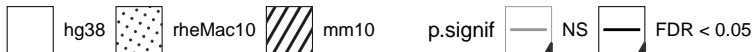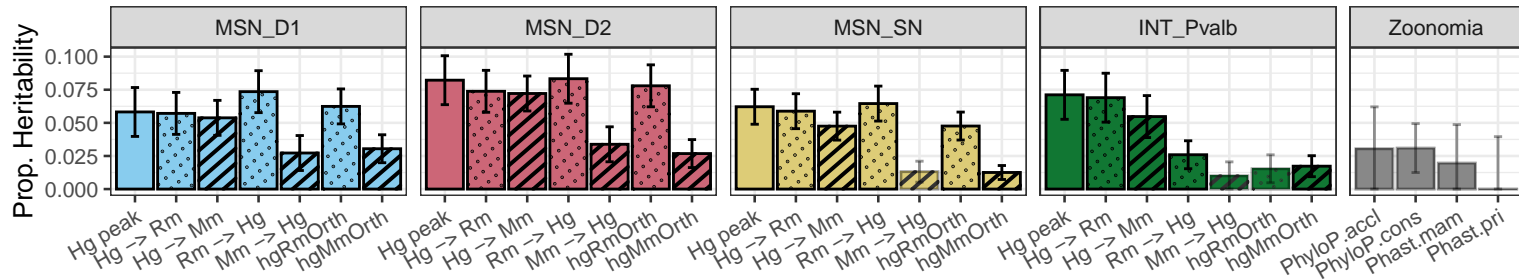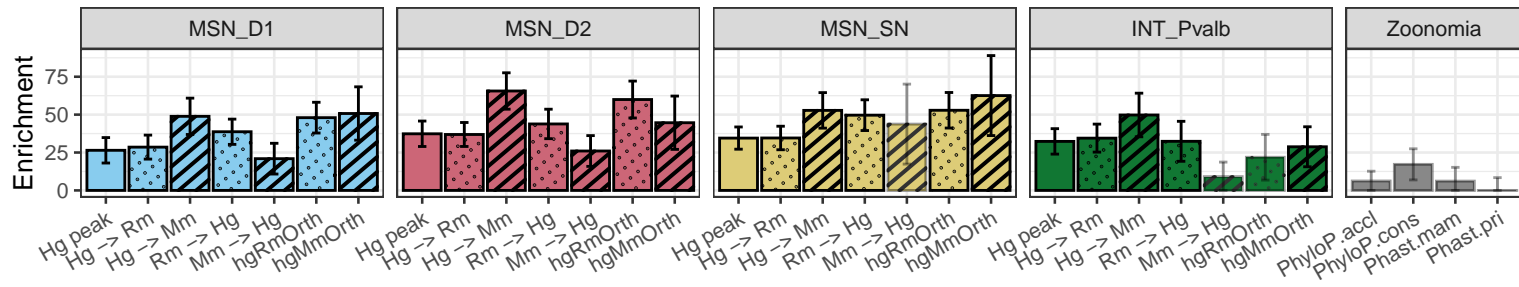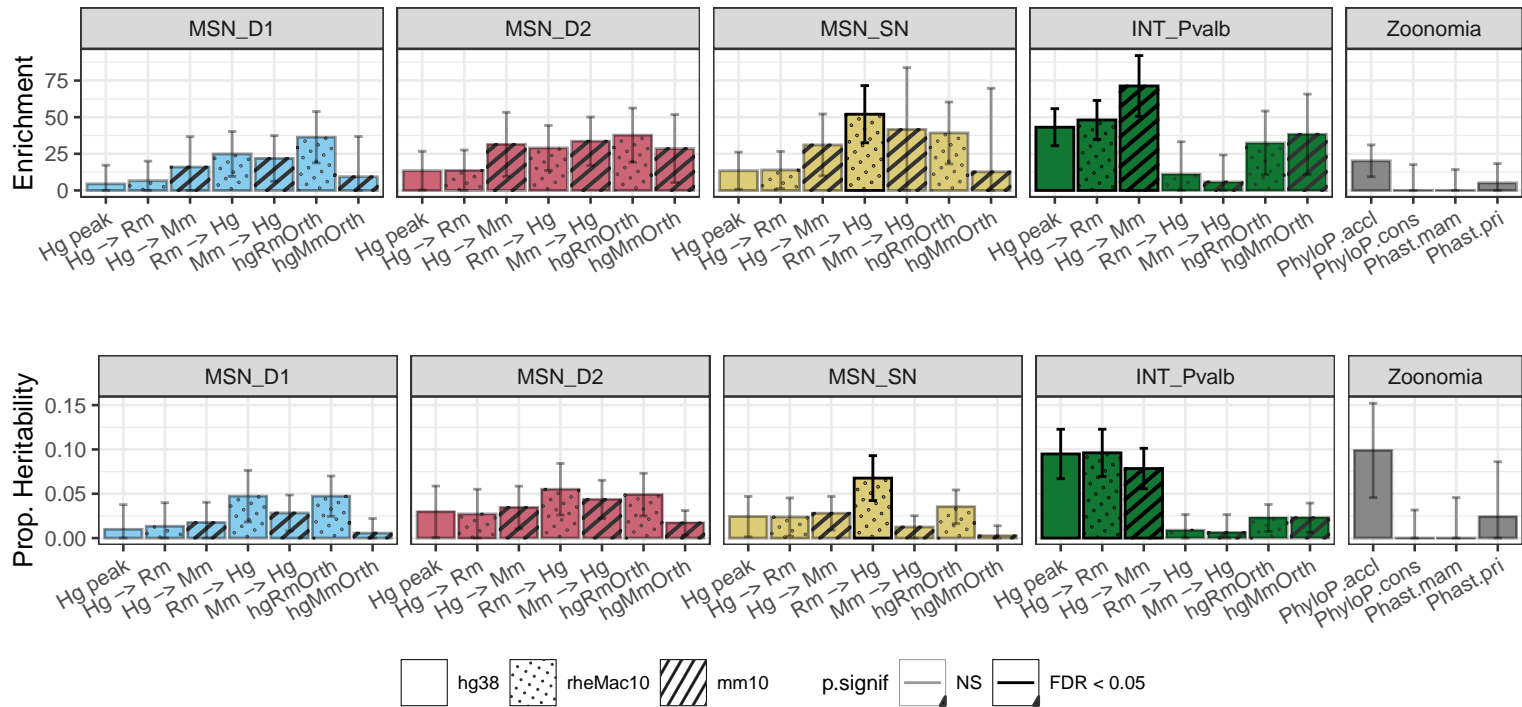
Trait: Bipolar_E

Trait: Depression_E

Legend: hg38, rheMac10, mm10; p.signif: NS, FDR < 0.05

Trait: MDD_E

Trait: OCD_E

Trait: PTSD_A

Trait: PTSD_E

Legend: □ hg38 · rheMac10 ▨ mm10 | p.signif — NS
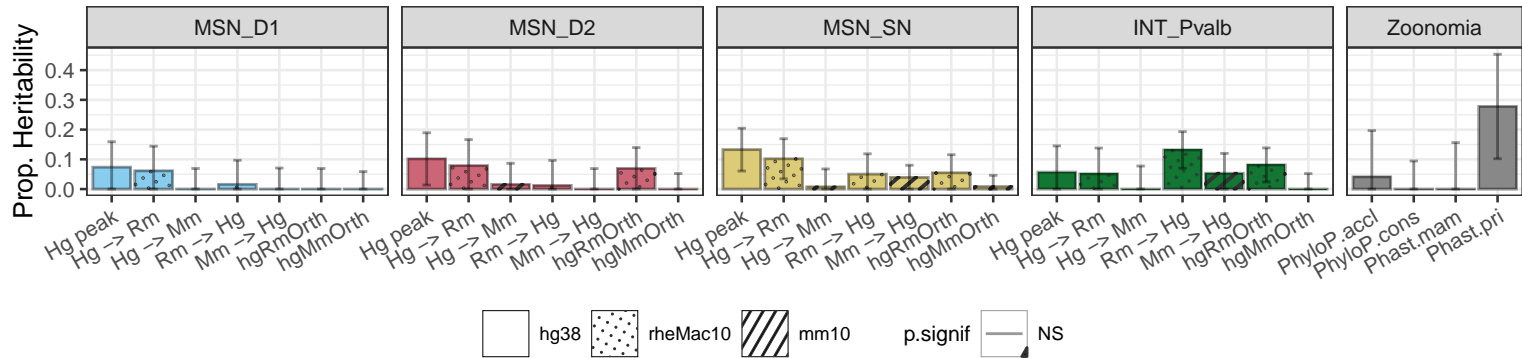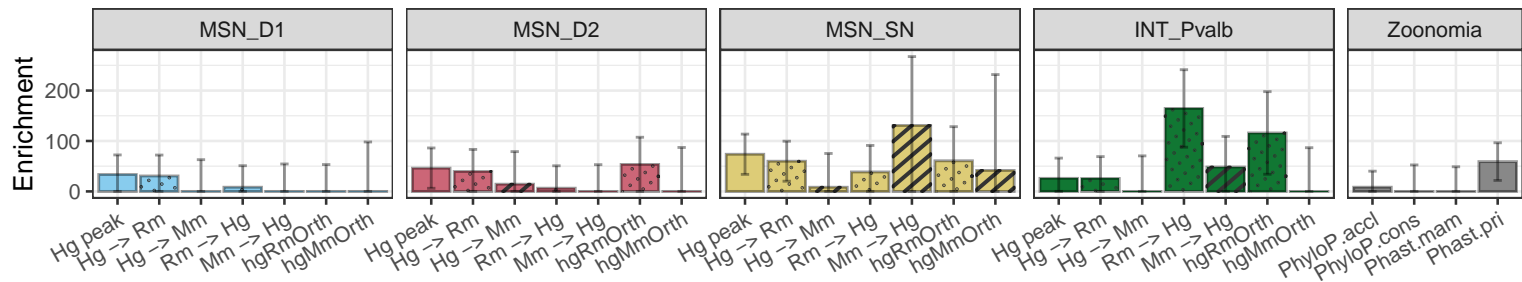
Trait: Schizophrenia_E
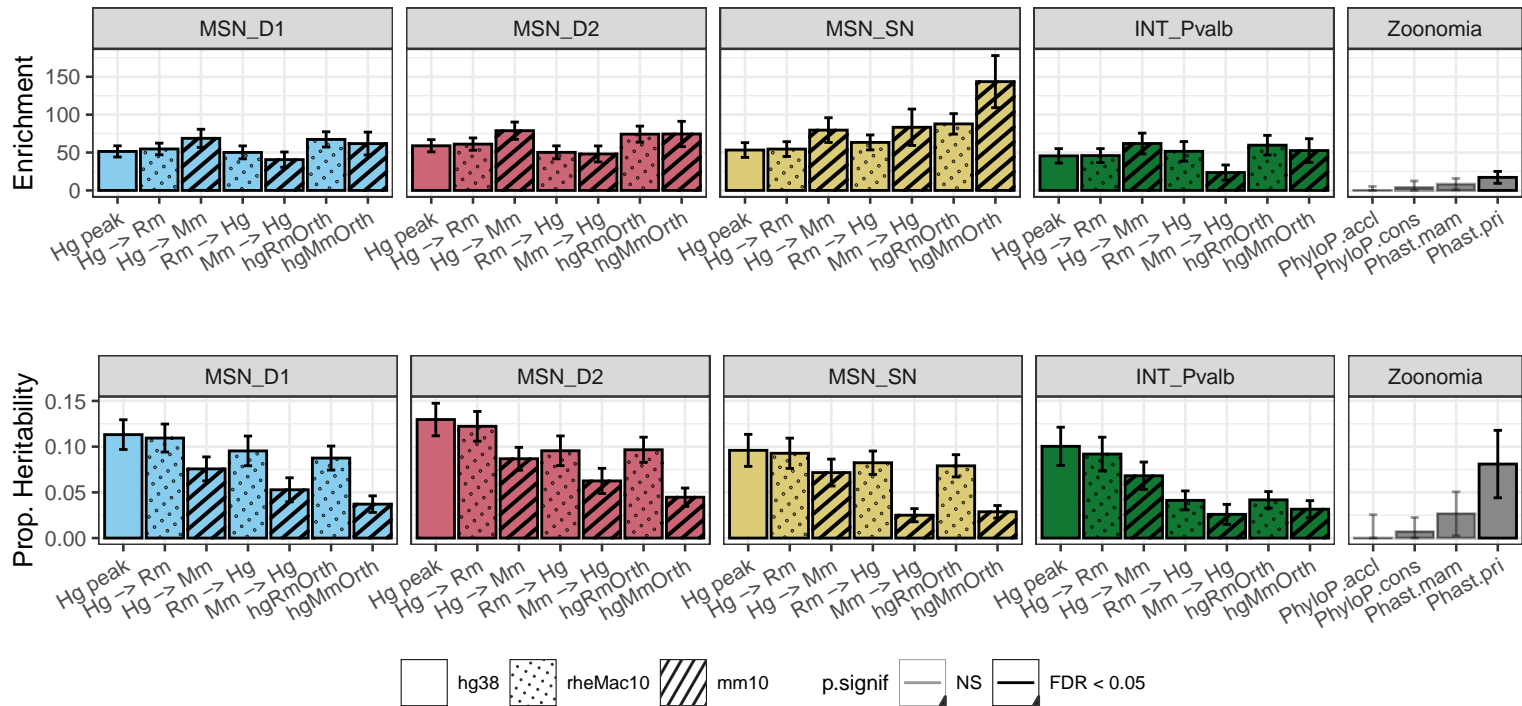
Trait: AUDIT−C_E
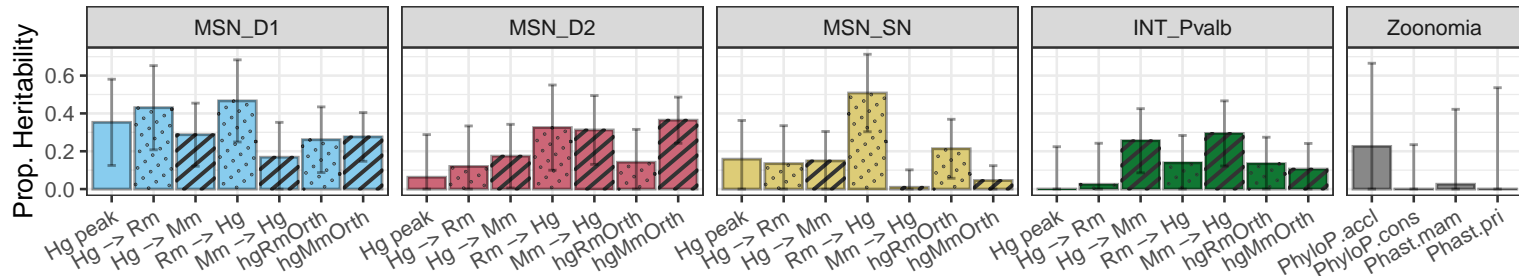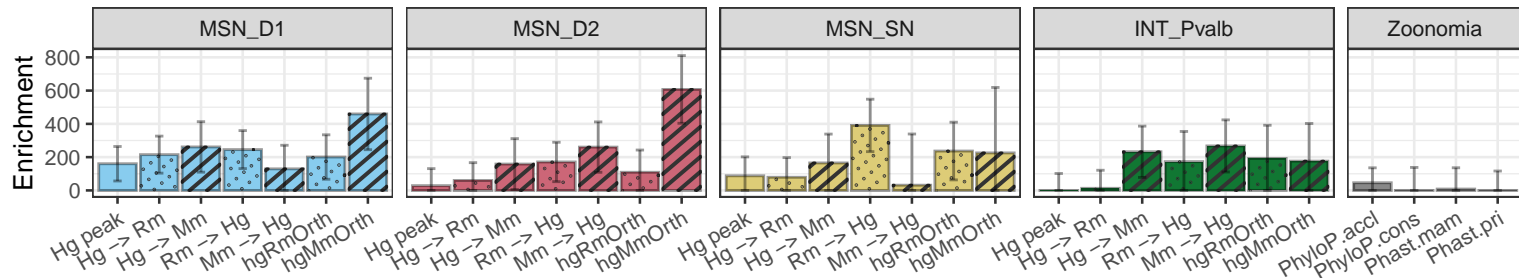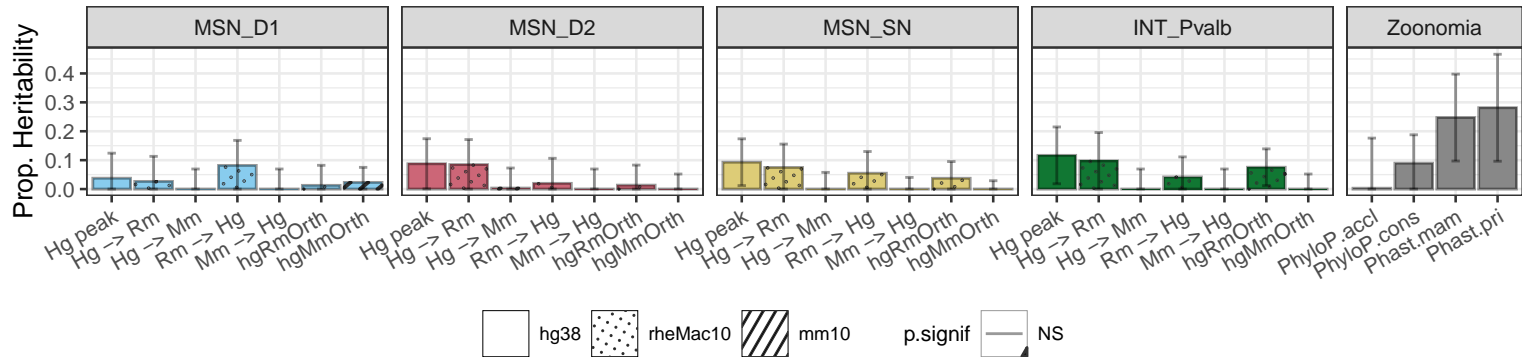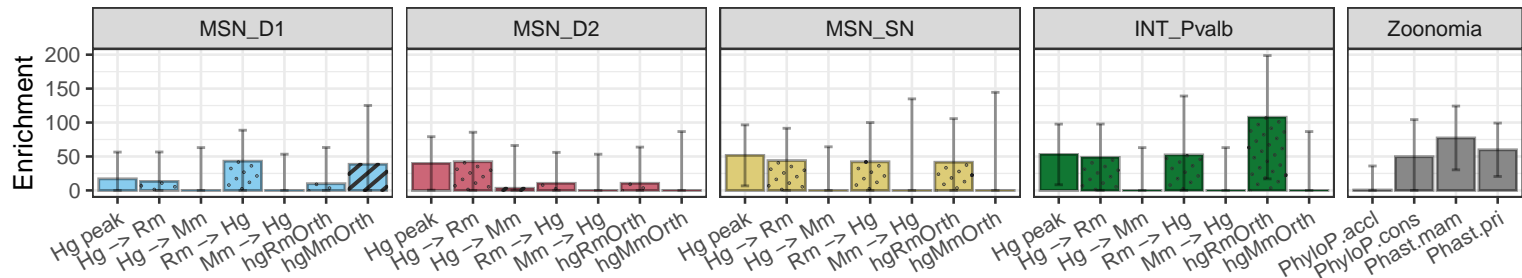
Trait: DrinksPerWeek_E

Trait: CannabisUse_E

Trait: CoffeePerDay_E

Trait: SmokAgeOfInit_E

Trait: SmokCessation_E
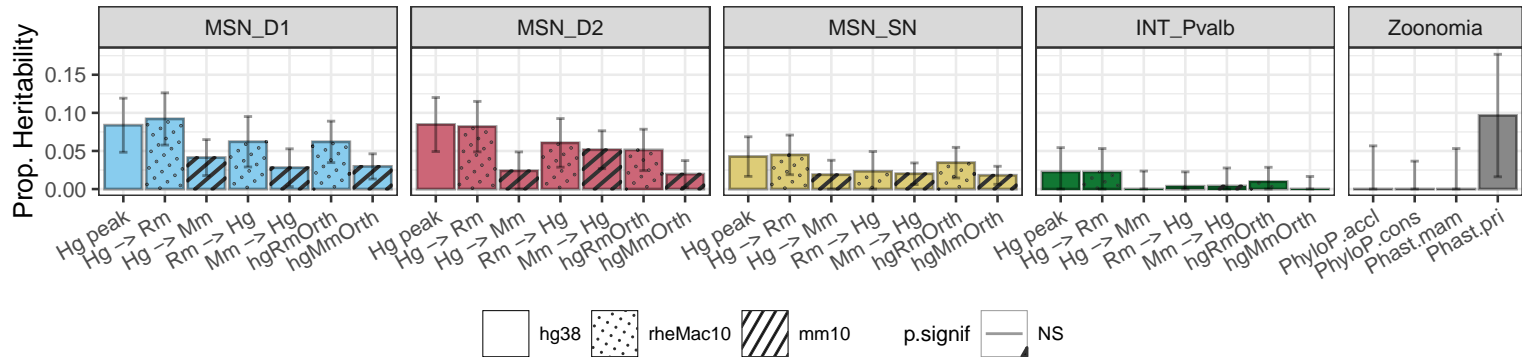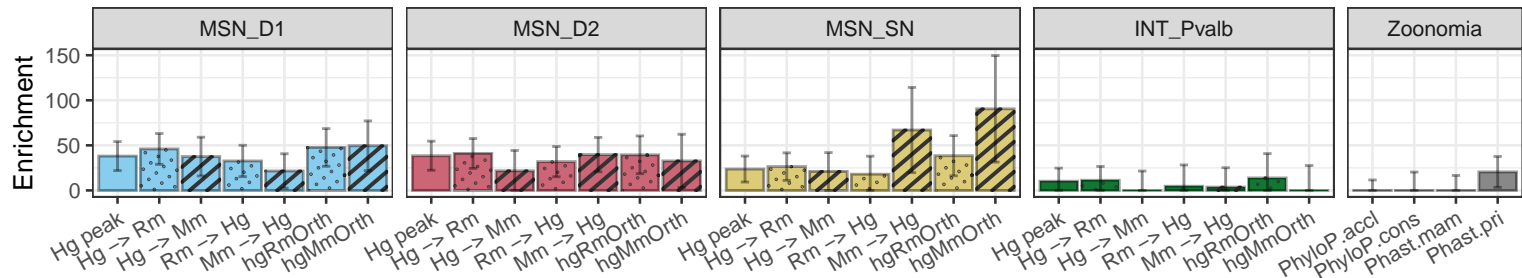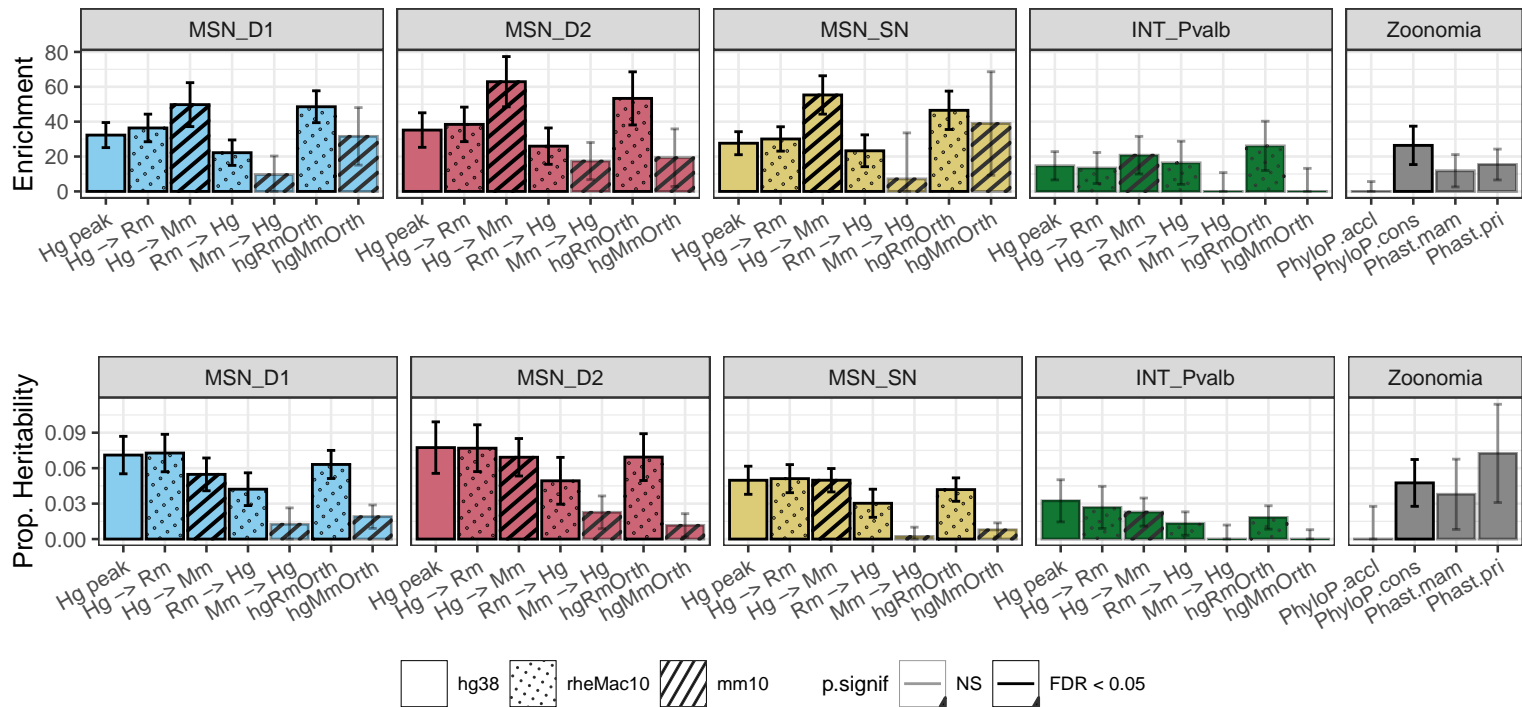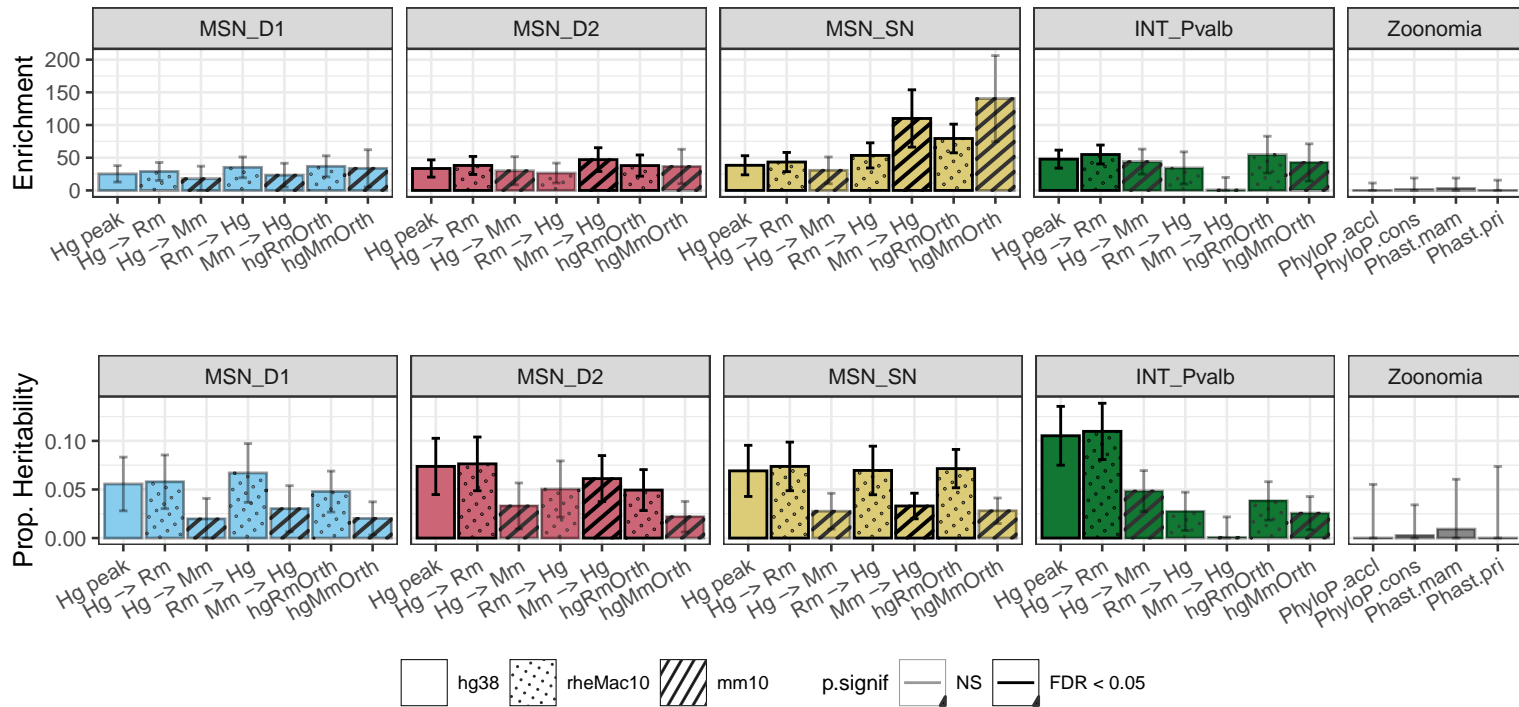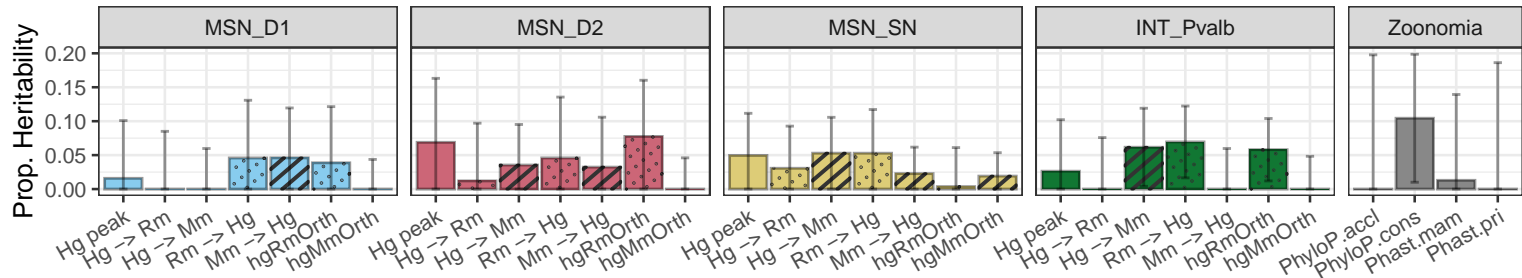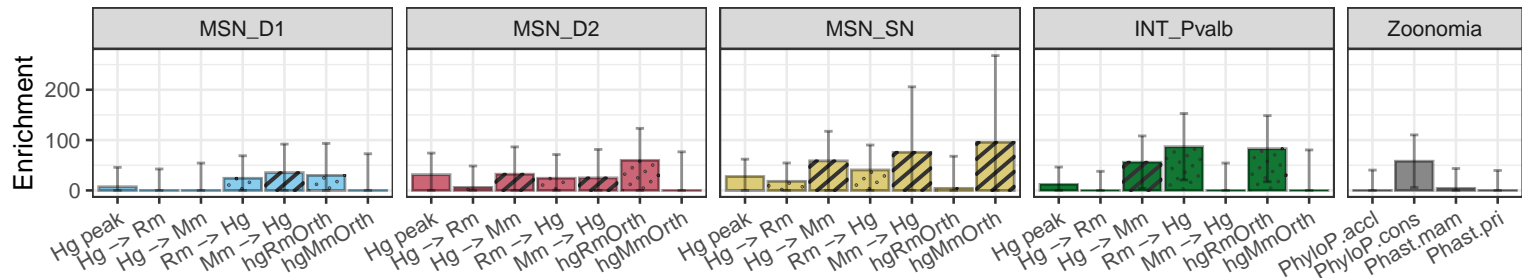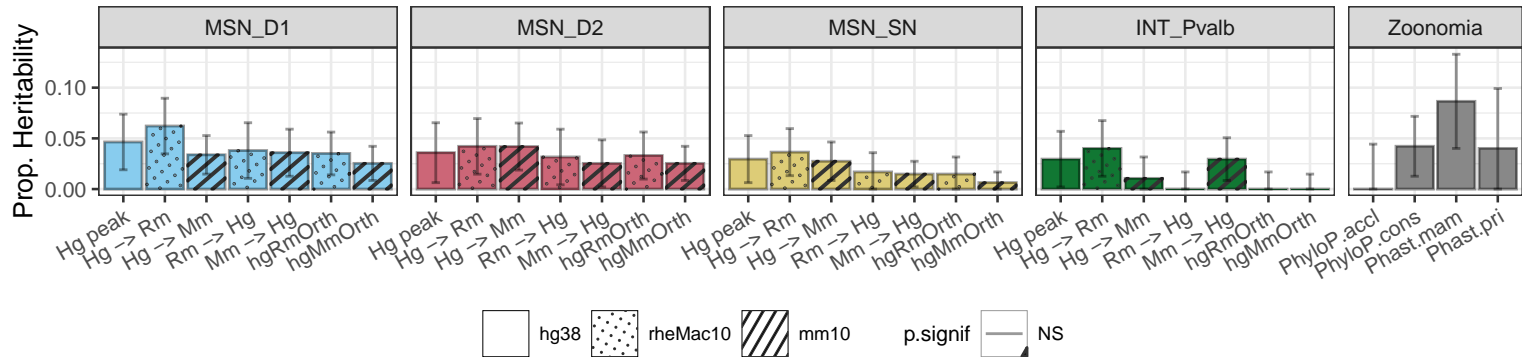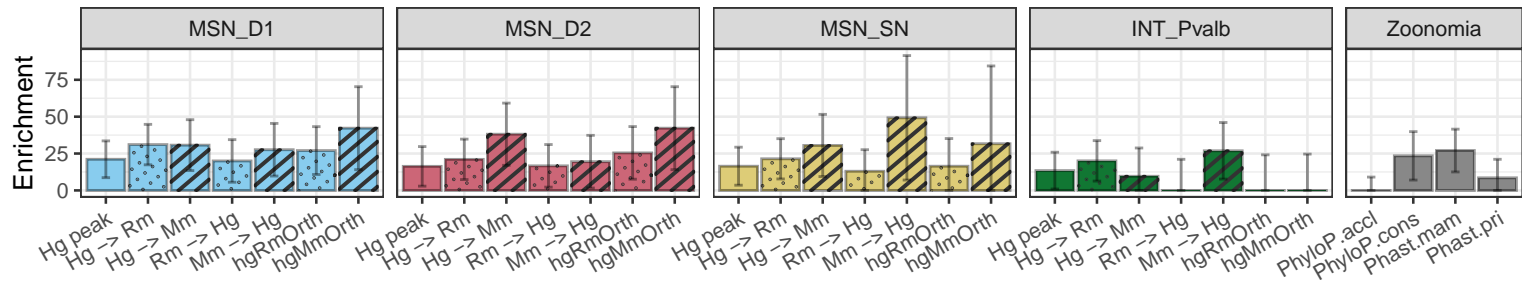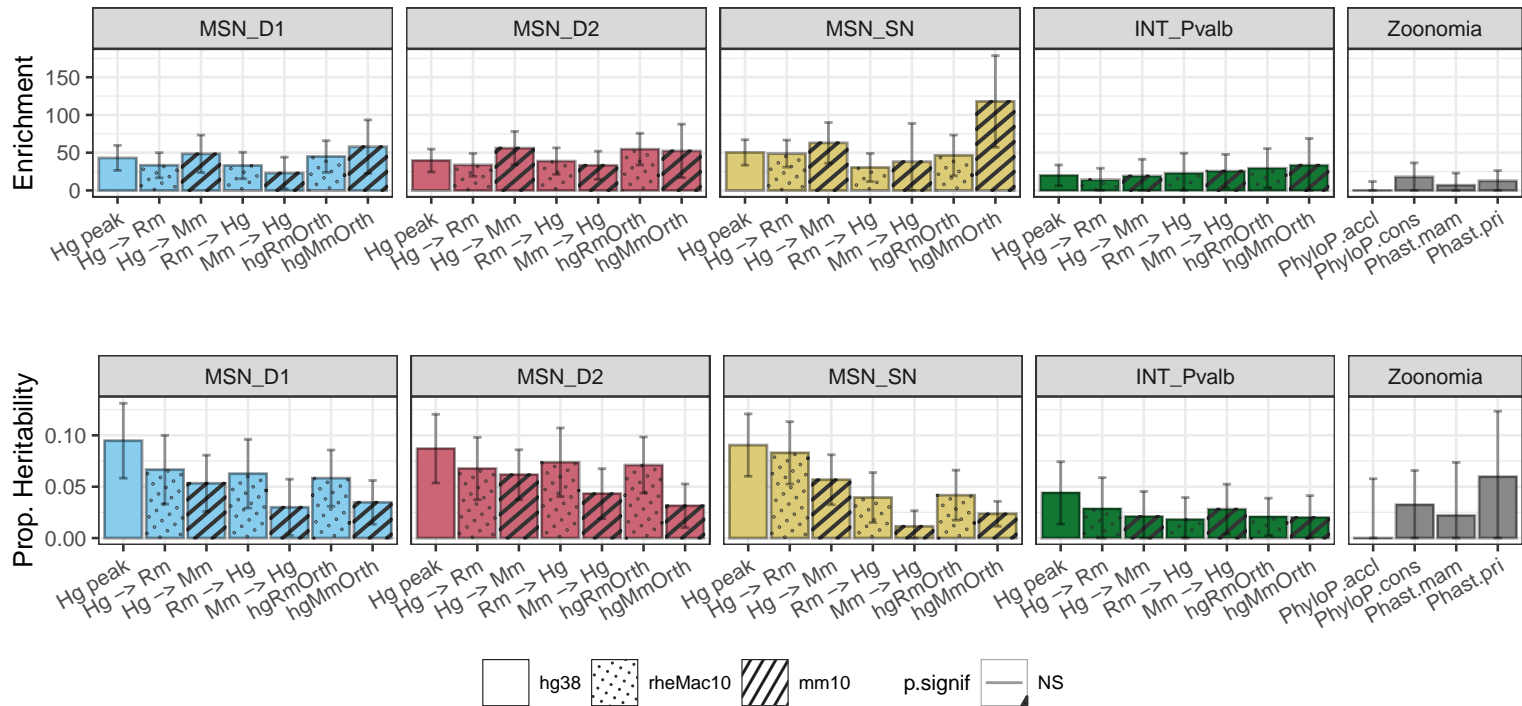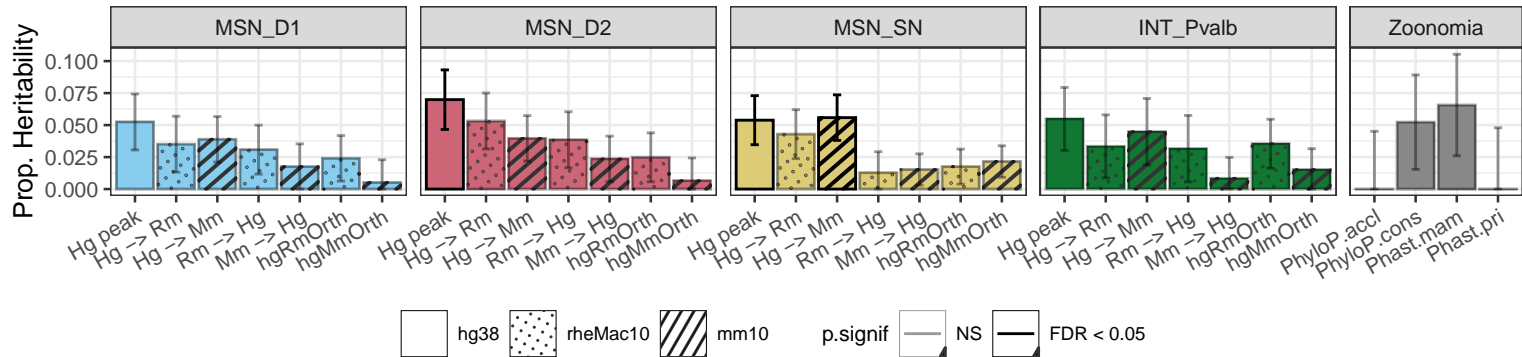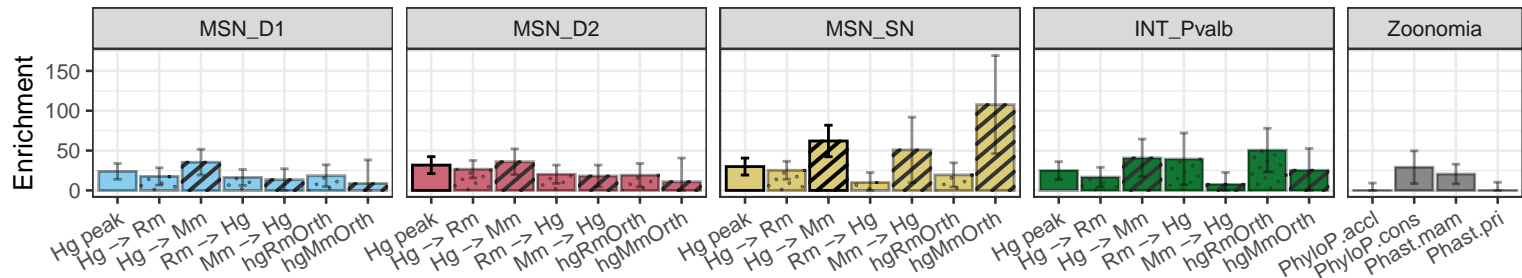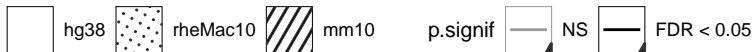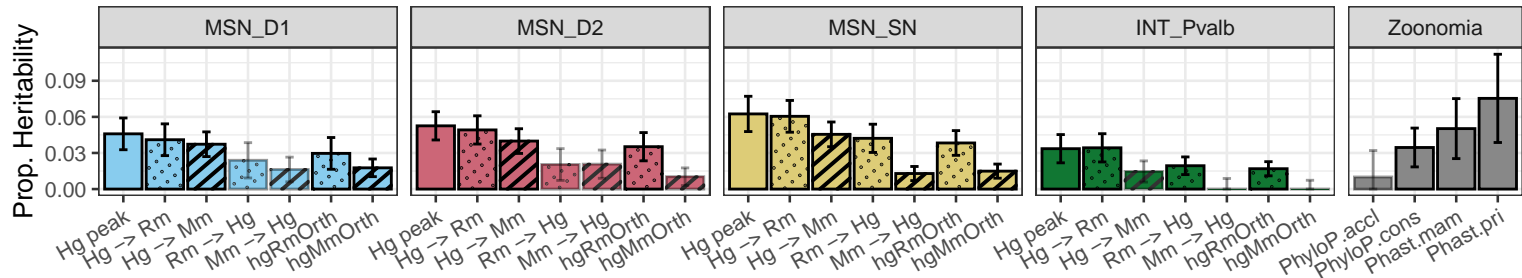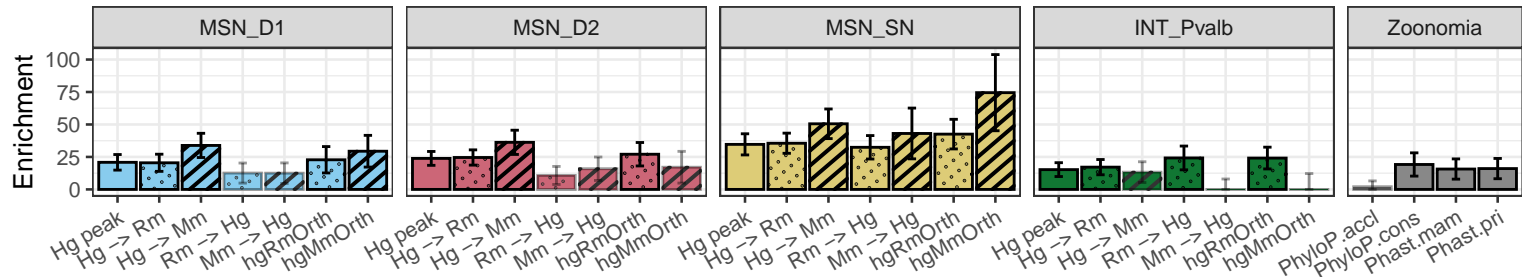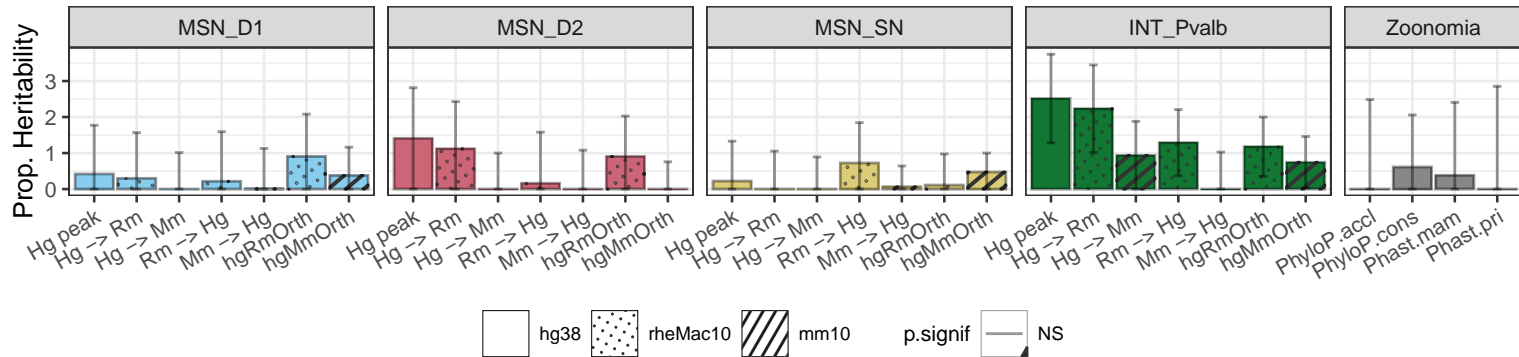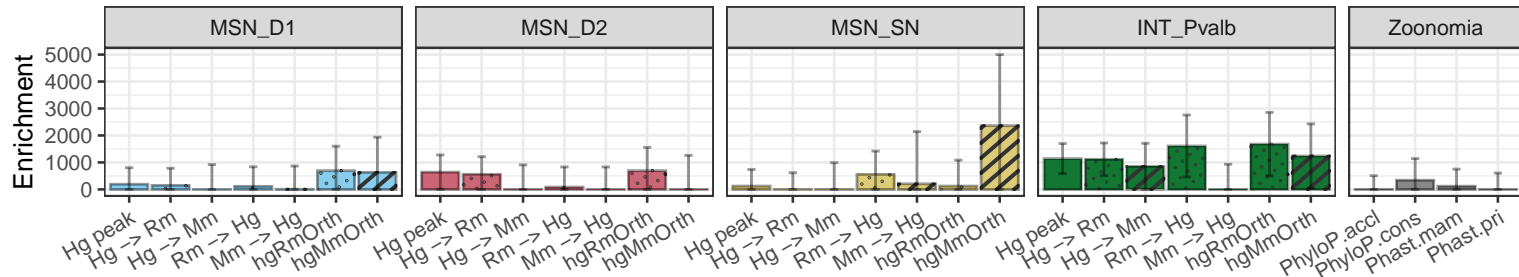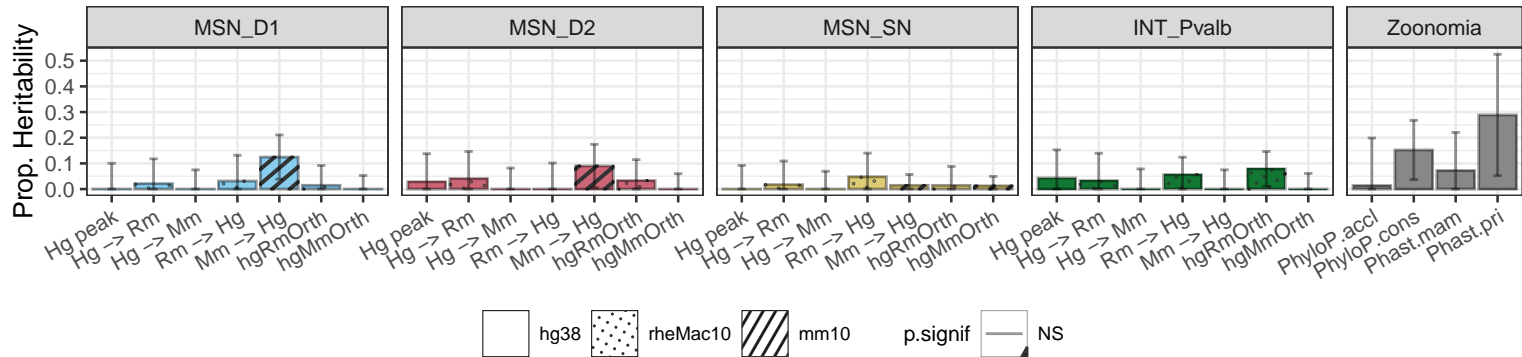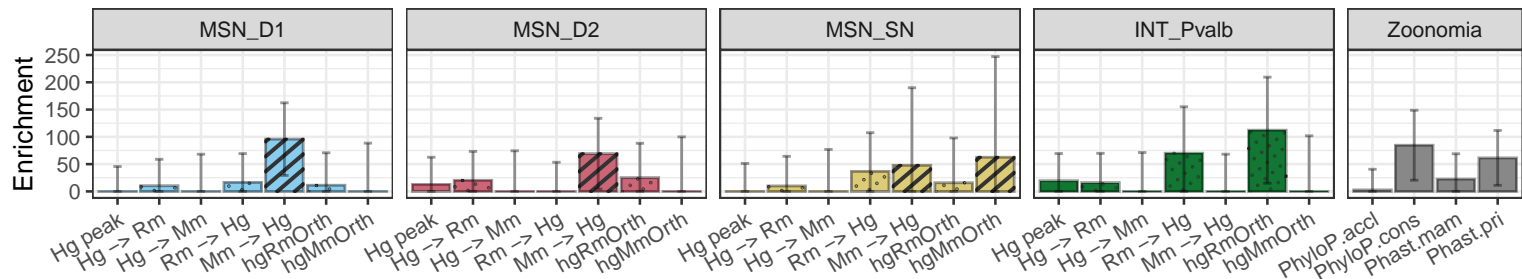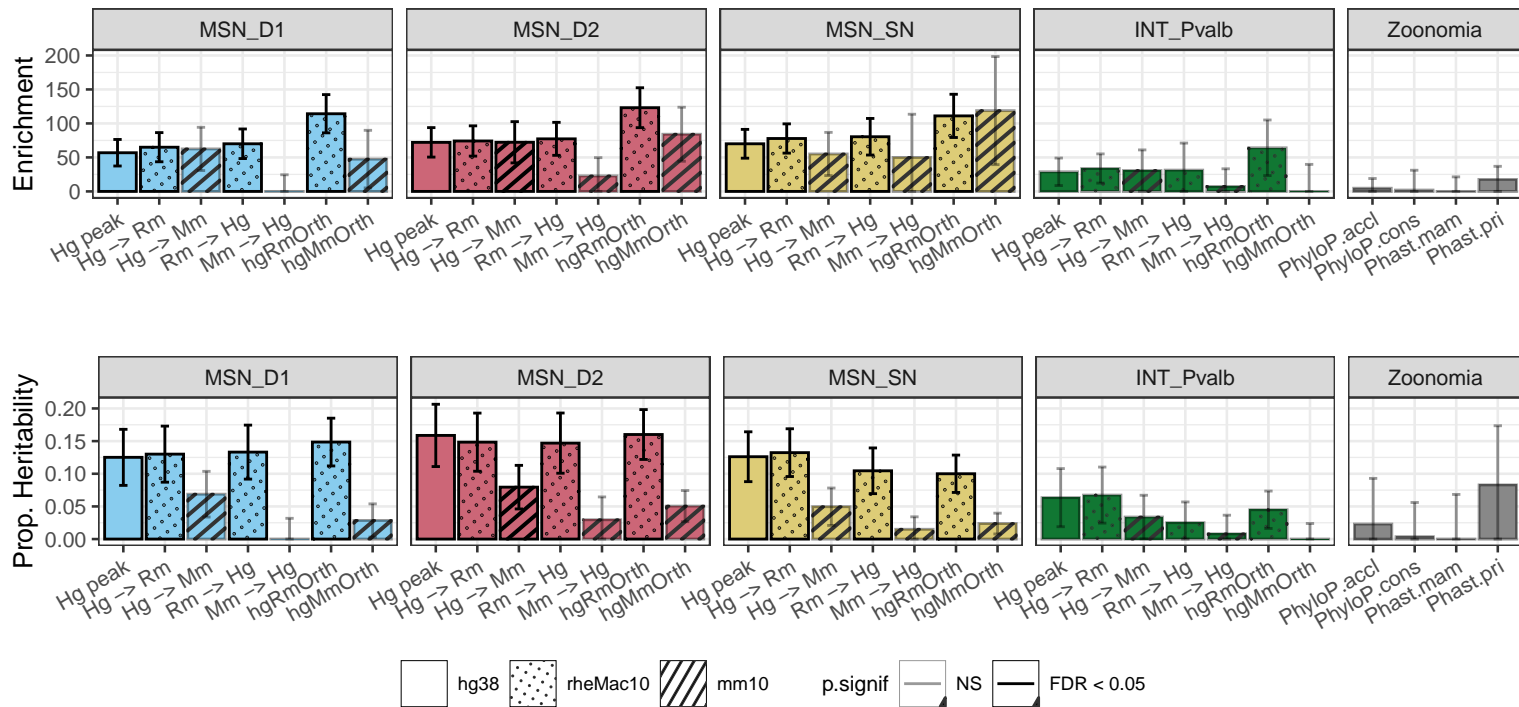
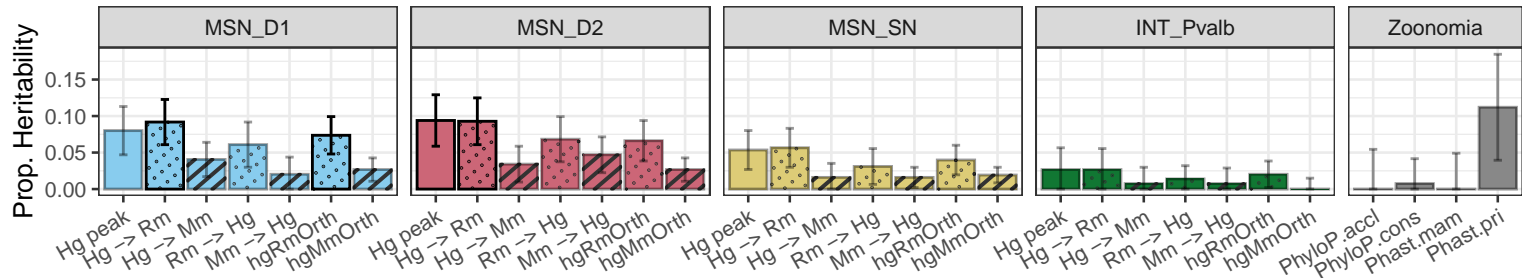Trait: SmokCigPerDay_E

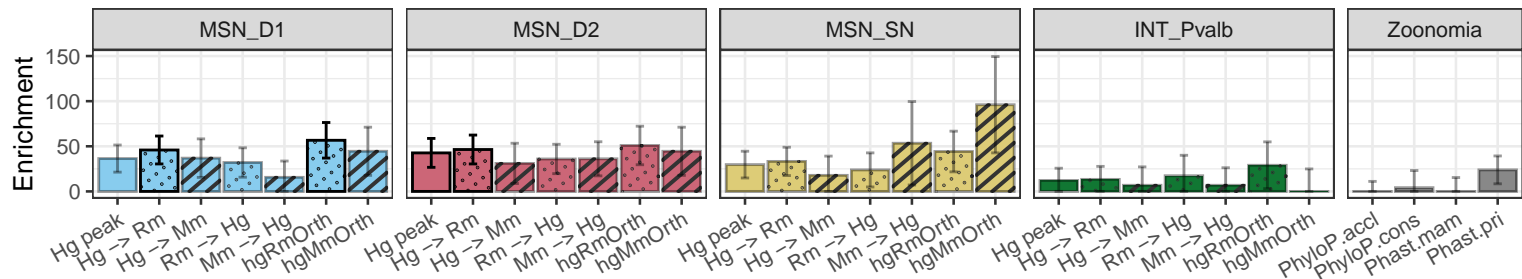Trait: SmokInitiation_E

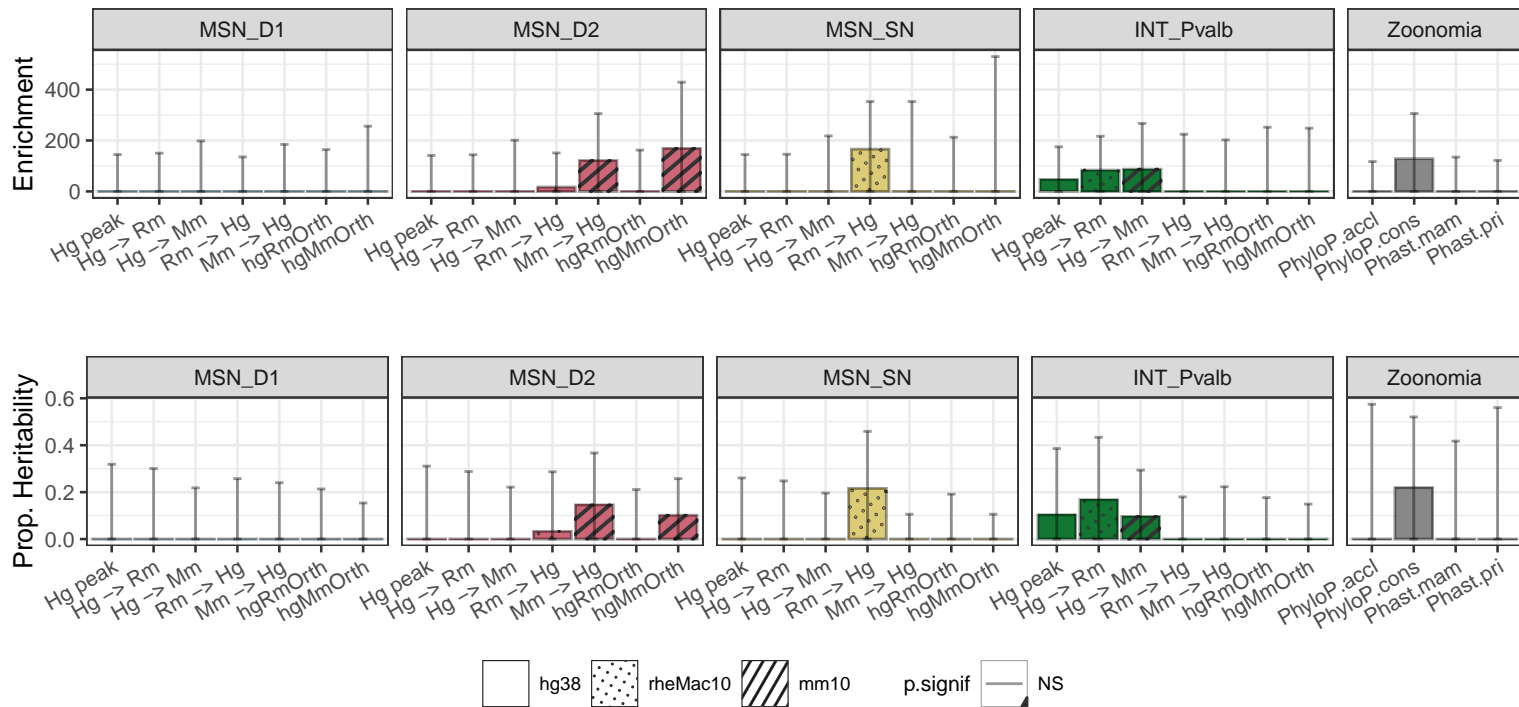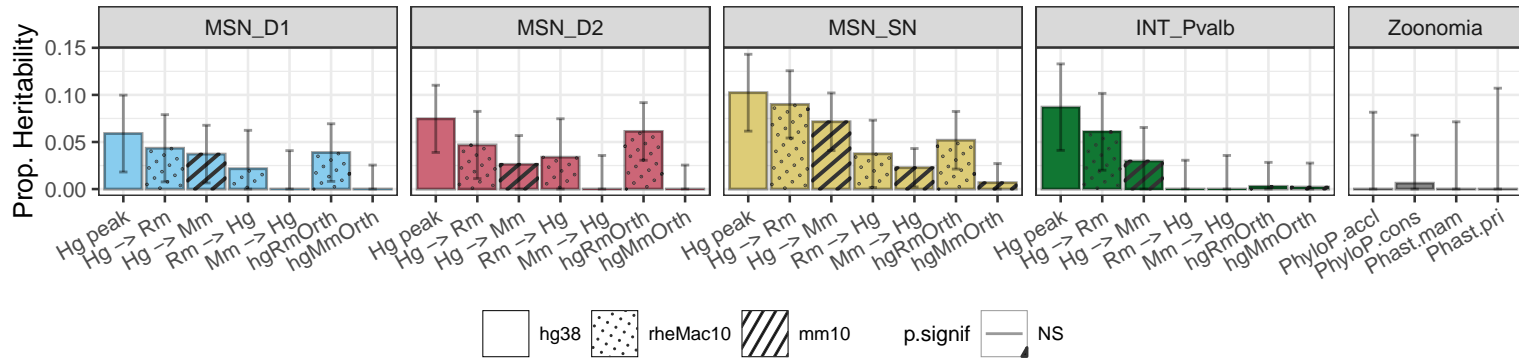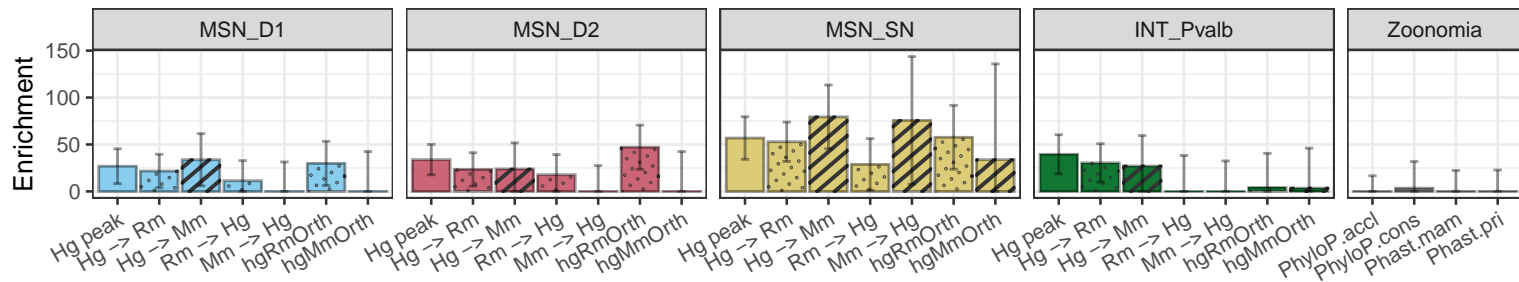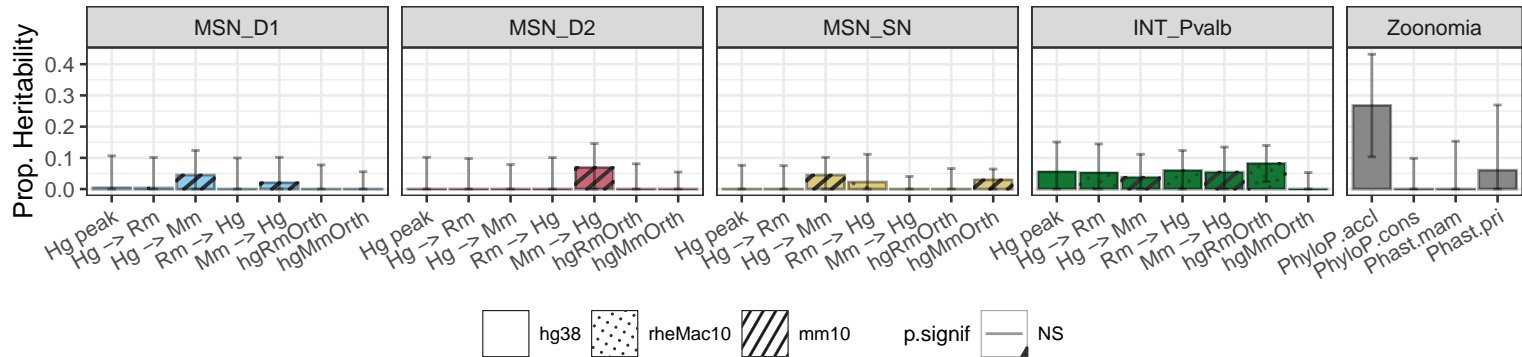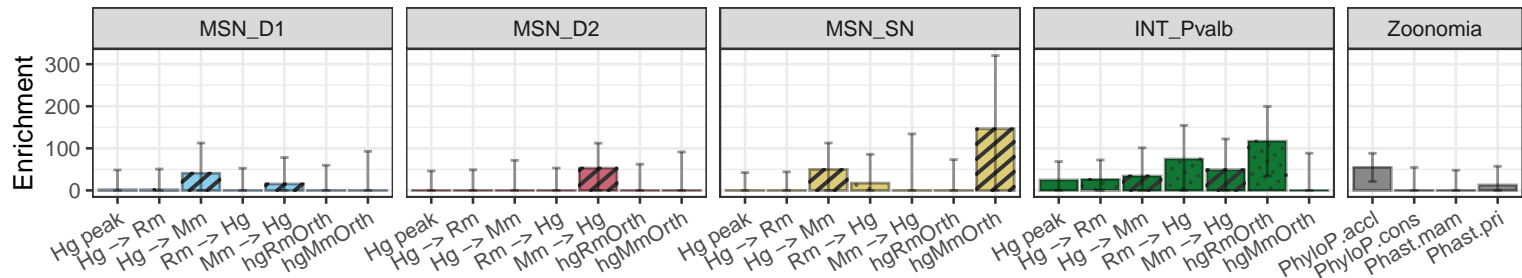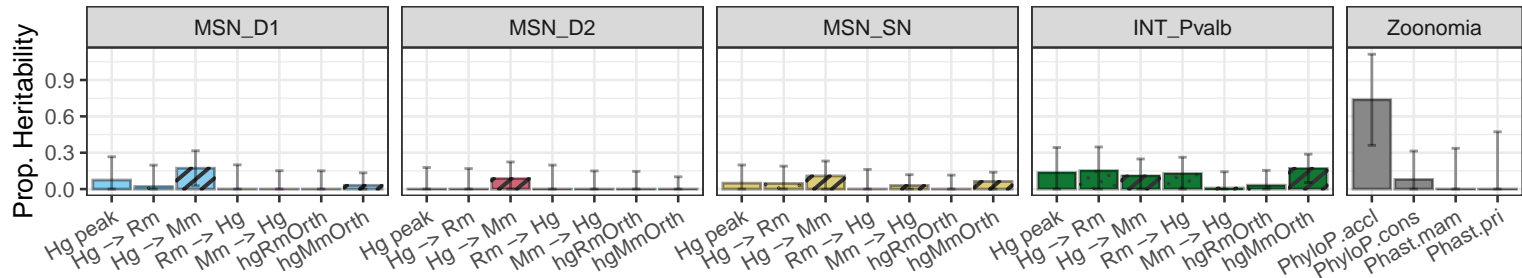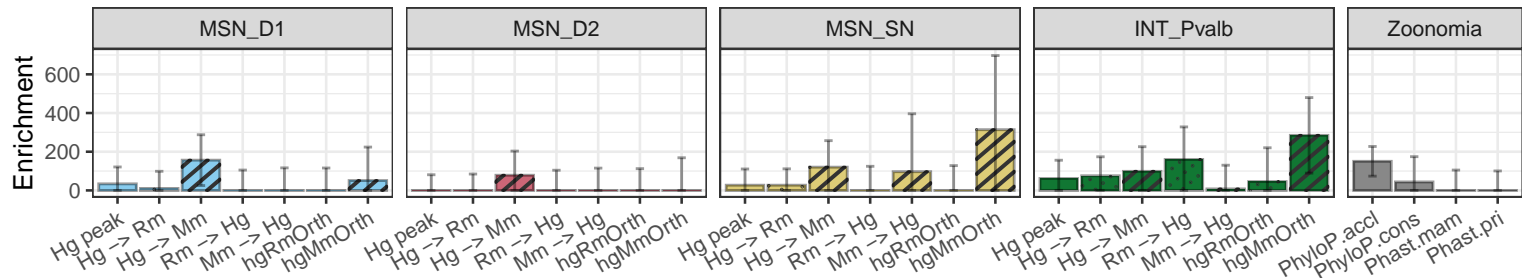Trait: OpioidUse_E

Trait: AlcoholDep_E
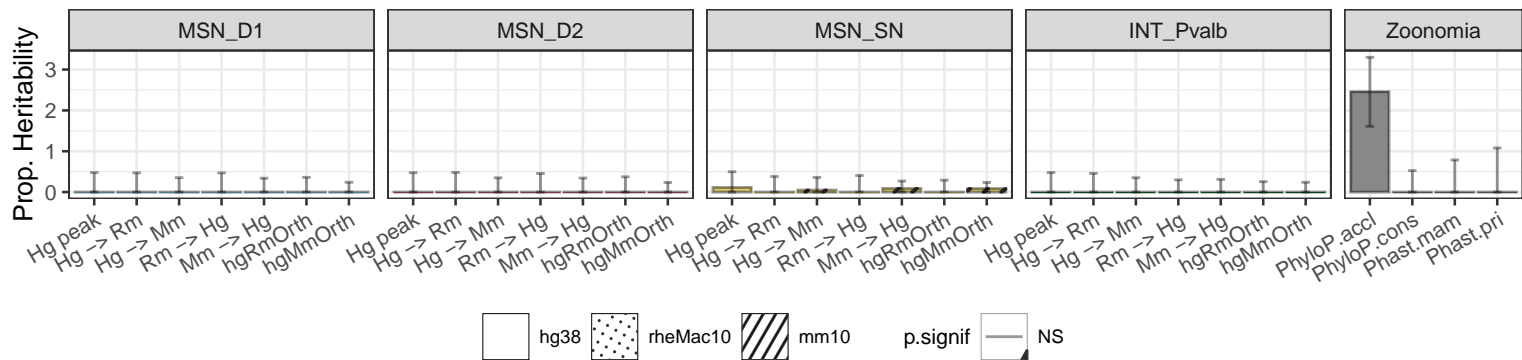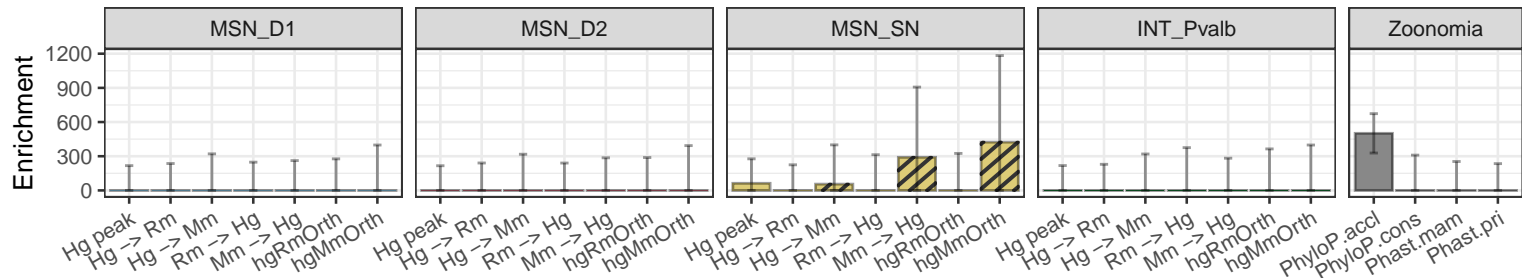
Trait: AUDIT−P_E

Trait: AUDIT−Tot_E
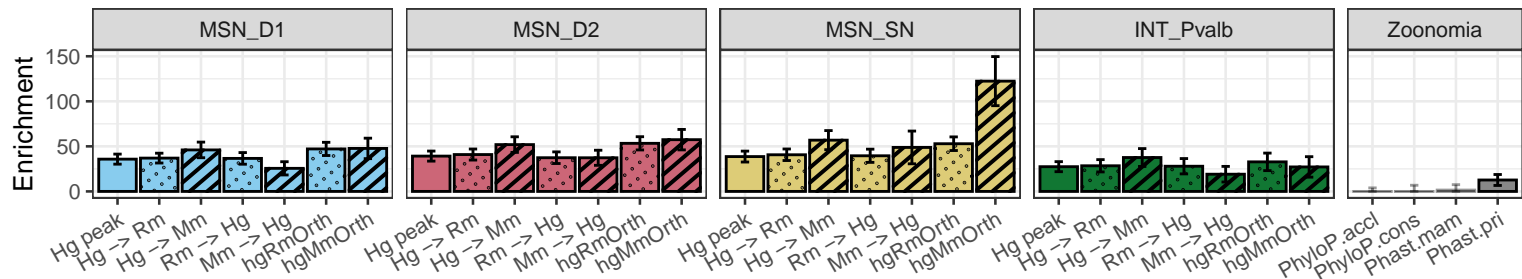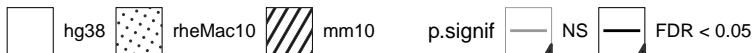
# Trait: CannabisUD_A
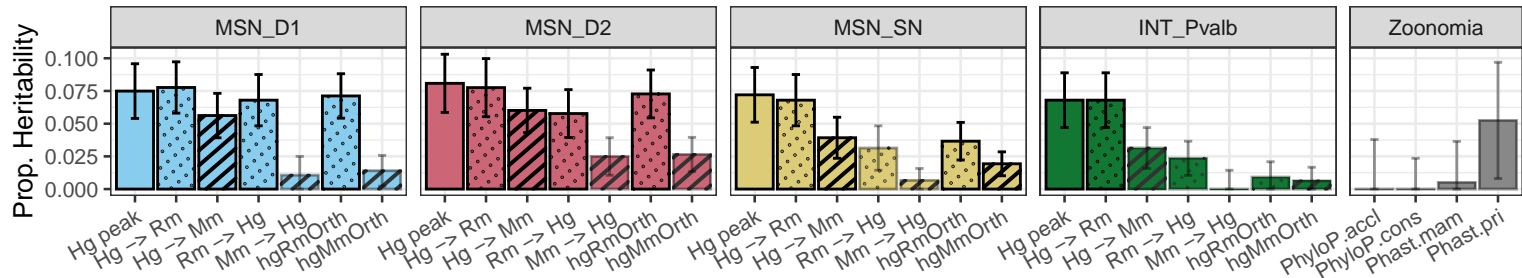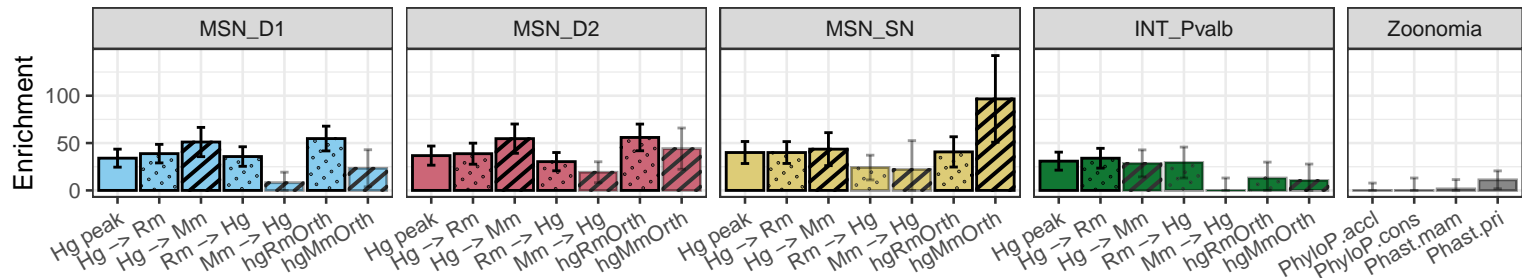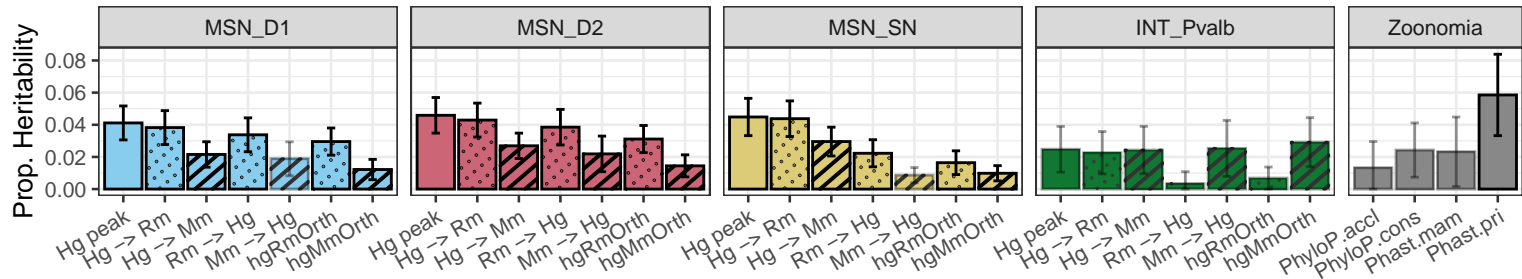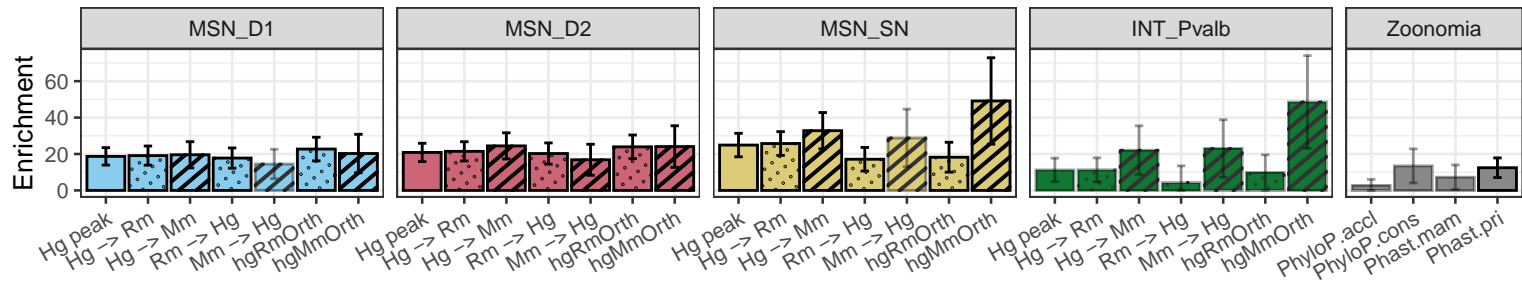
Trait: CannabisUD_E

Trait: CocaineDep_E

**Trait: OpioidDep_E**

Trait: OpioidDep−vs−Exp_A

**Trait: EduAttain_E**

**Trait: Income_E**

Legend: hg38 | rheMac10 | mm10 | p.signif — NS | FDR < 0.05
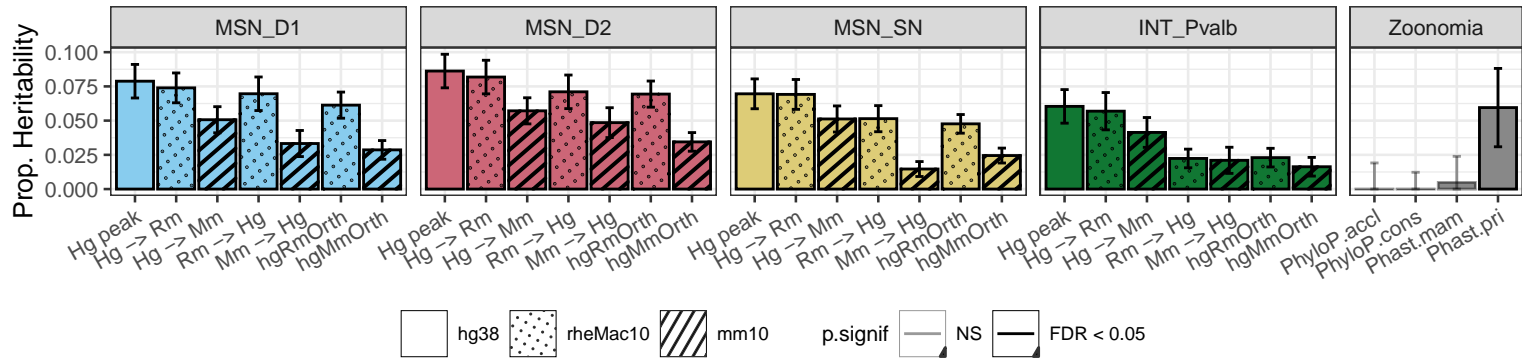
Trait: BMI_E

Trait: BrainVol_E
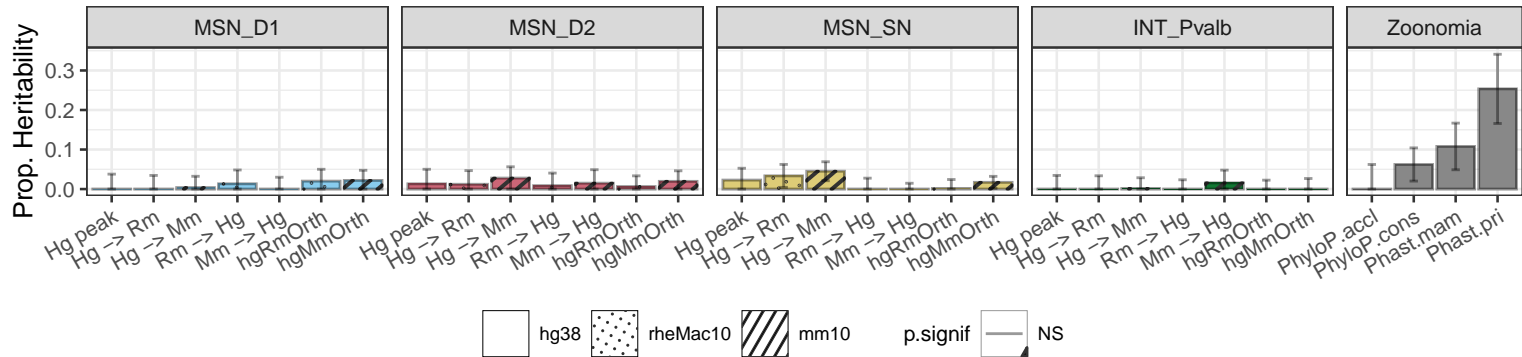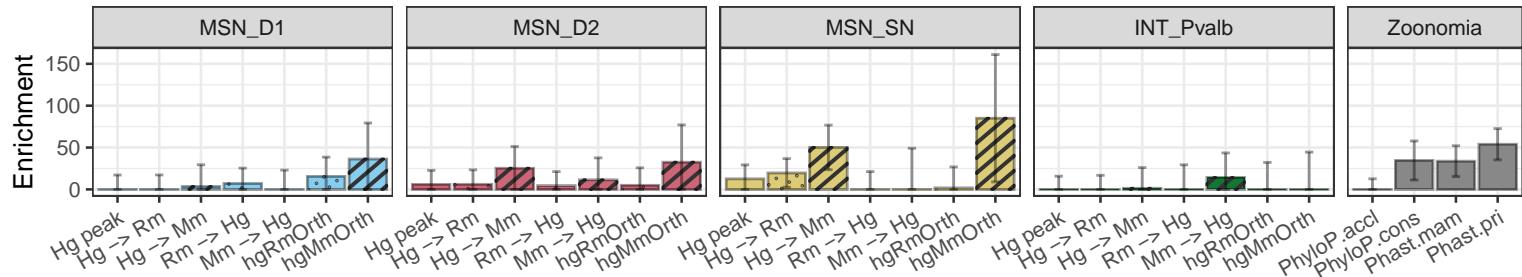
Trait: Neuroticsim_E
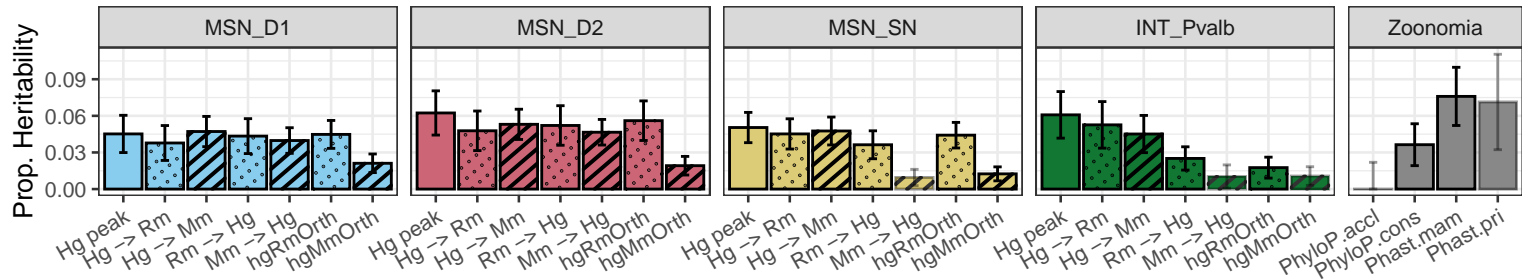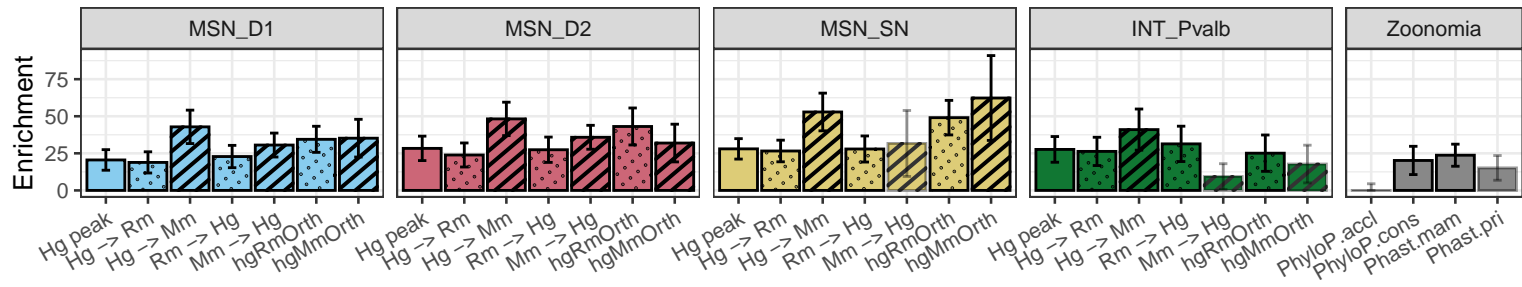
Trait: Intelligence_E
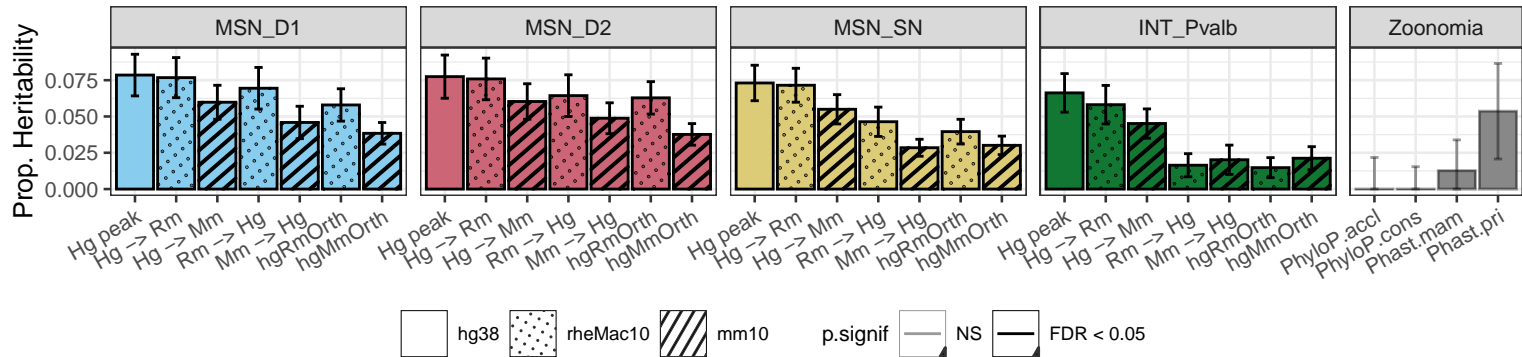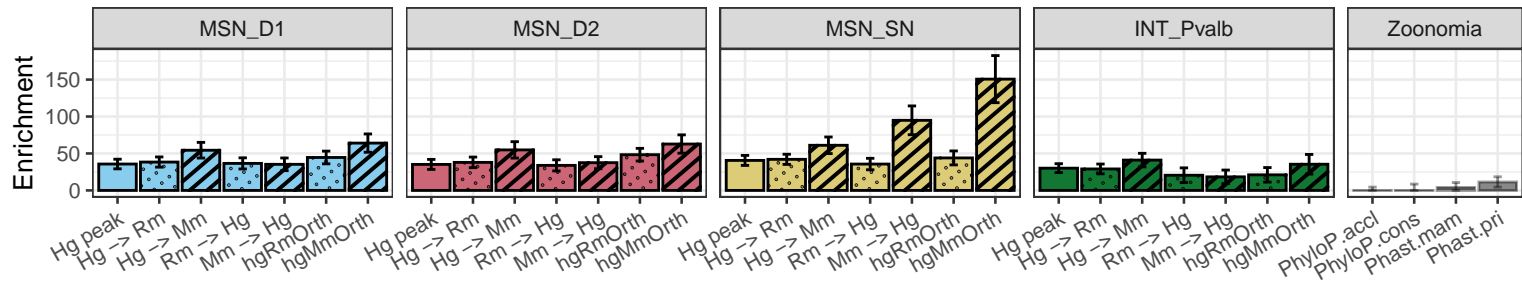
Trait: RiskyBehavior_E

**Trait: Worry_E**

Top row (Enrichment) and bottom row (Prop. Heritability) bar charts across panels: MSN_D1, MSN_D2, MSN_SN, INT_Pvalb, Zoonomia. X-axis categories: Hg peak, Hg → Rm, Hg → Mm, Rm → Hg, Mm → Hg, hgRmOrth, hgMmOrth (and for Zoonomia: PhyloP.accl, PhyloP.cons, Phast.mam, Phast.pri). Legend: hg38, rheMac10, mm10; p.signif: NS, FDR < 0.05.
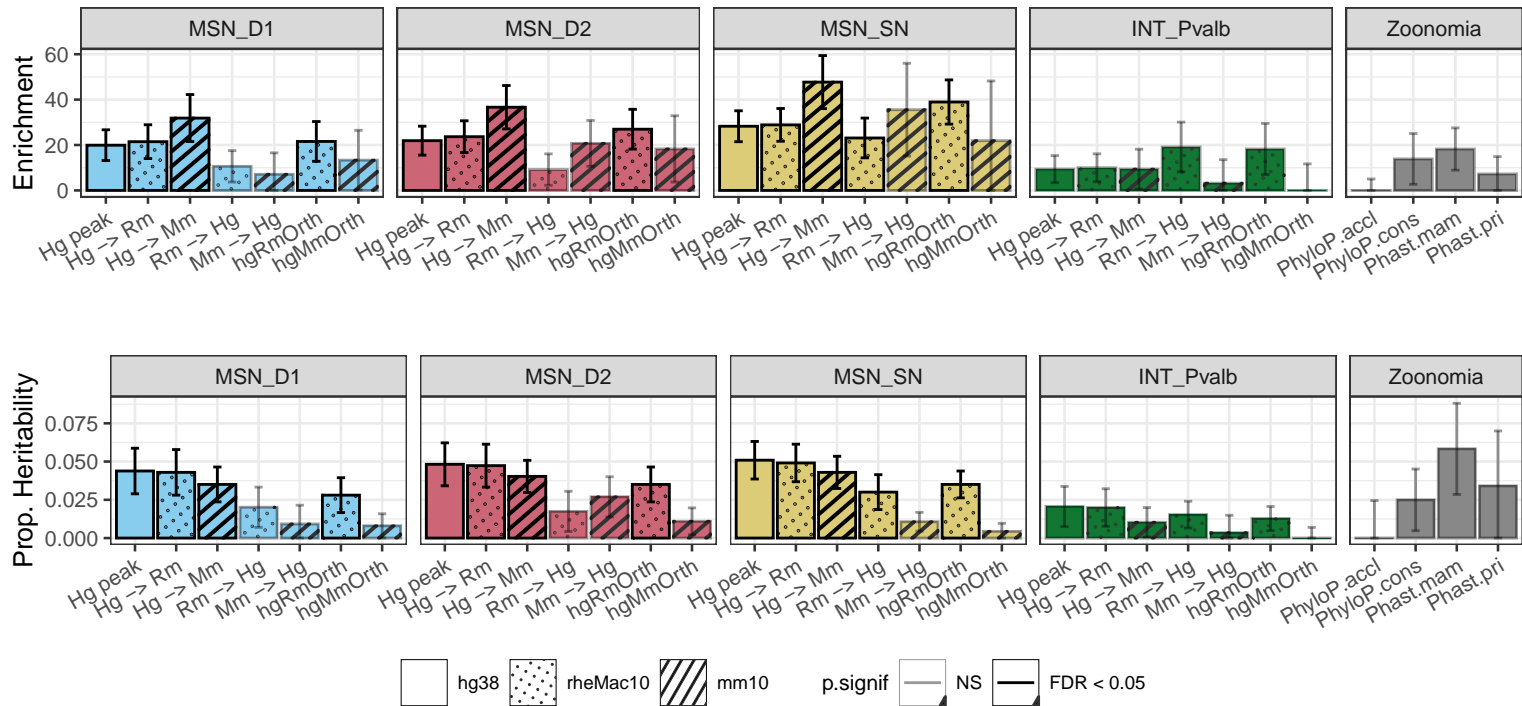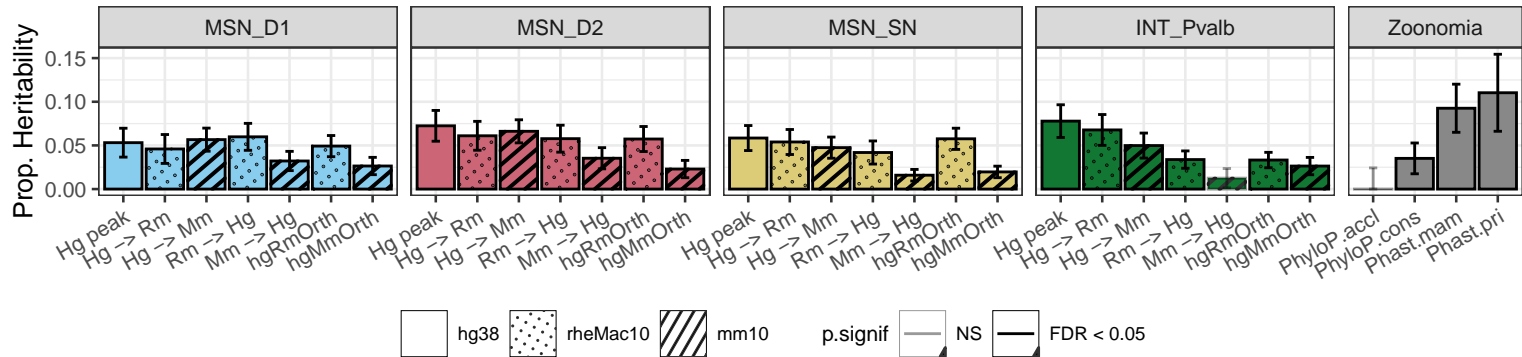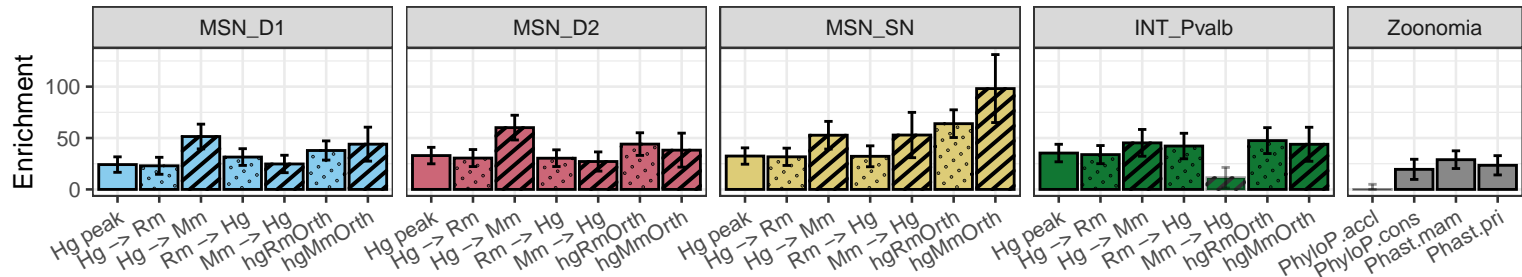
Trait: ChronicPain_E
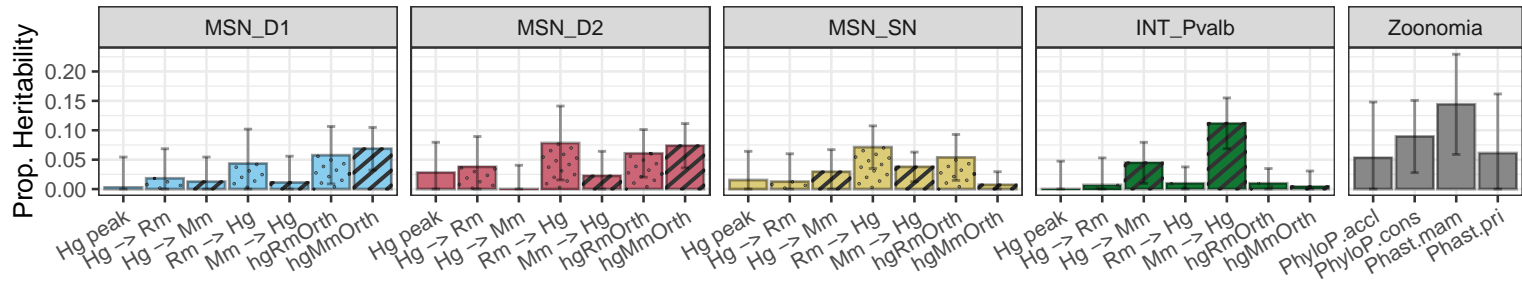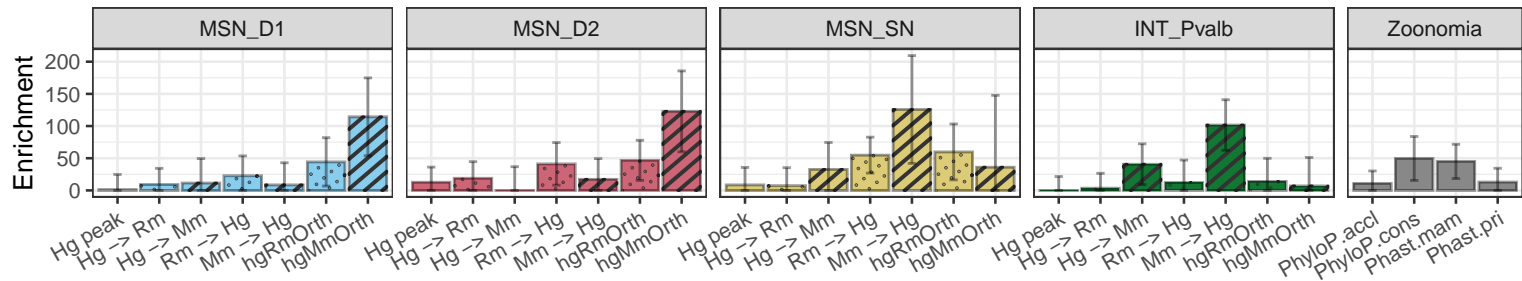
Trait: Headache_E

Trait: DaySleepiness_E

Trait: Dozing_E

Trait: Gettingup_E
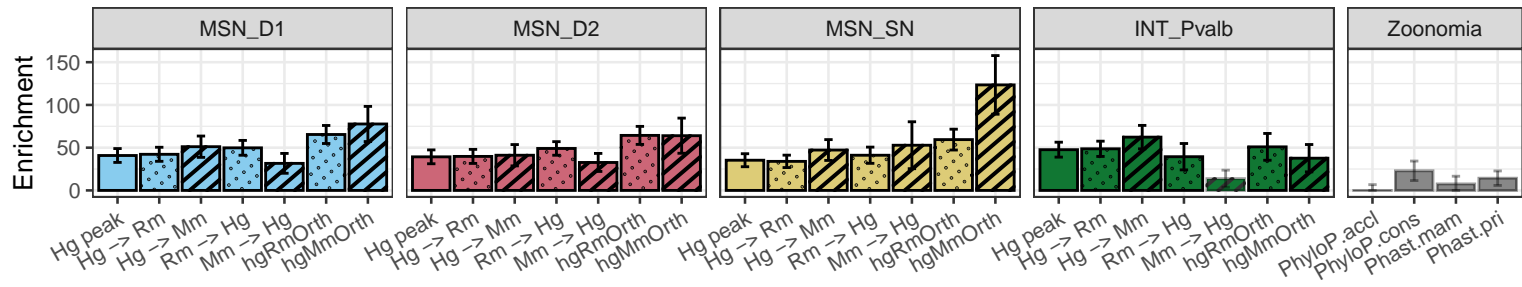
Trait: Insomnia_E
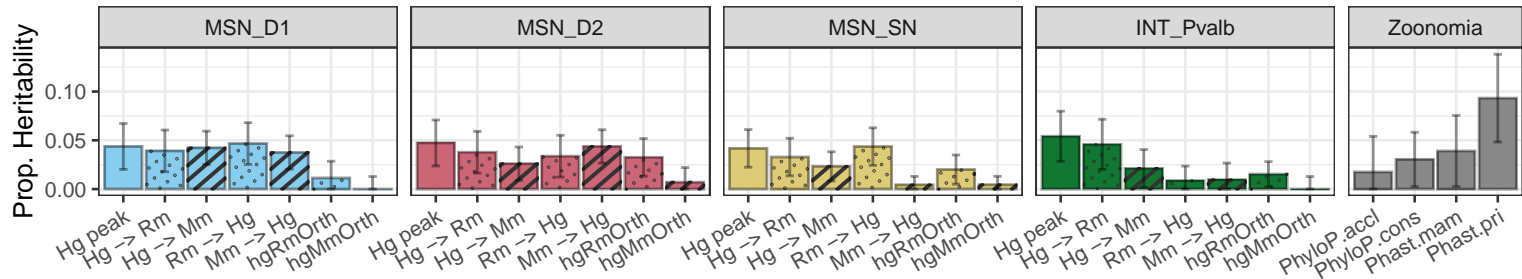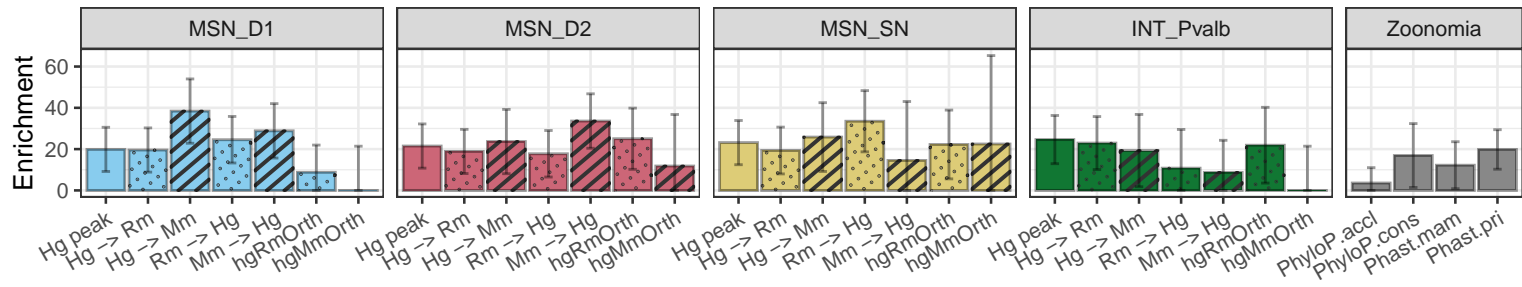
Trait: Morningness_E
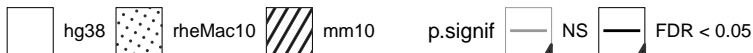
Trait: Napping_E

Trait: SleepDurLong_E
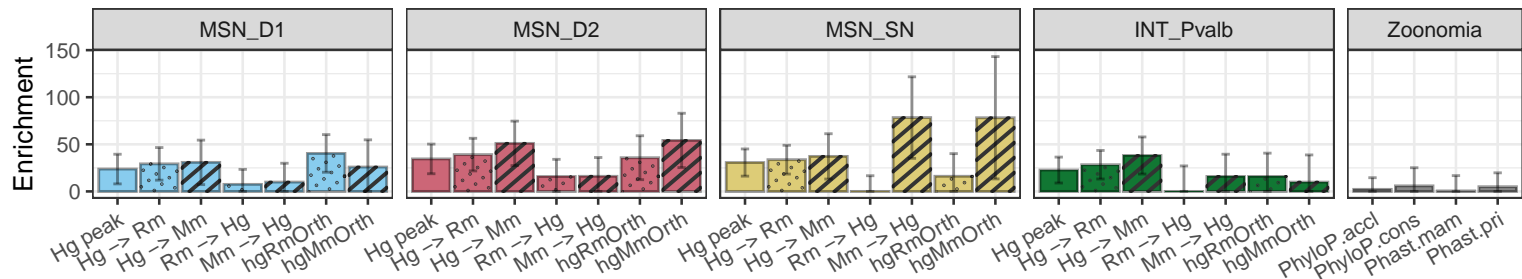
Trait: SleepDurShort_E

Trait: SleepDurTot_E

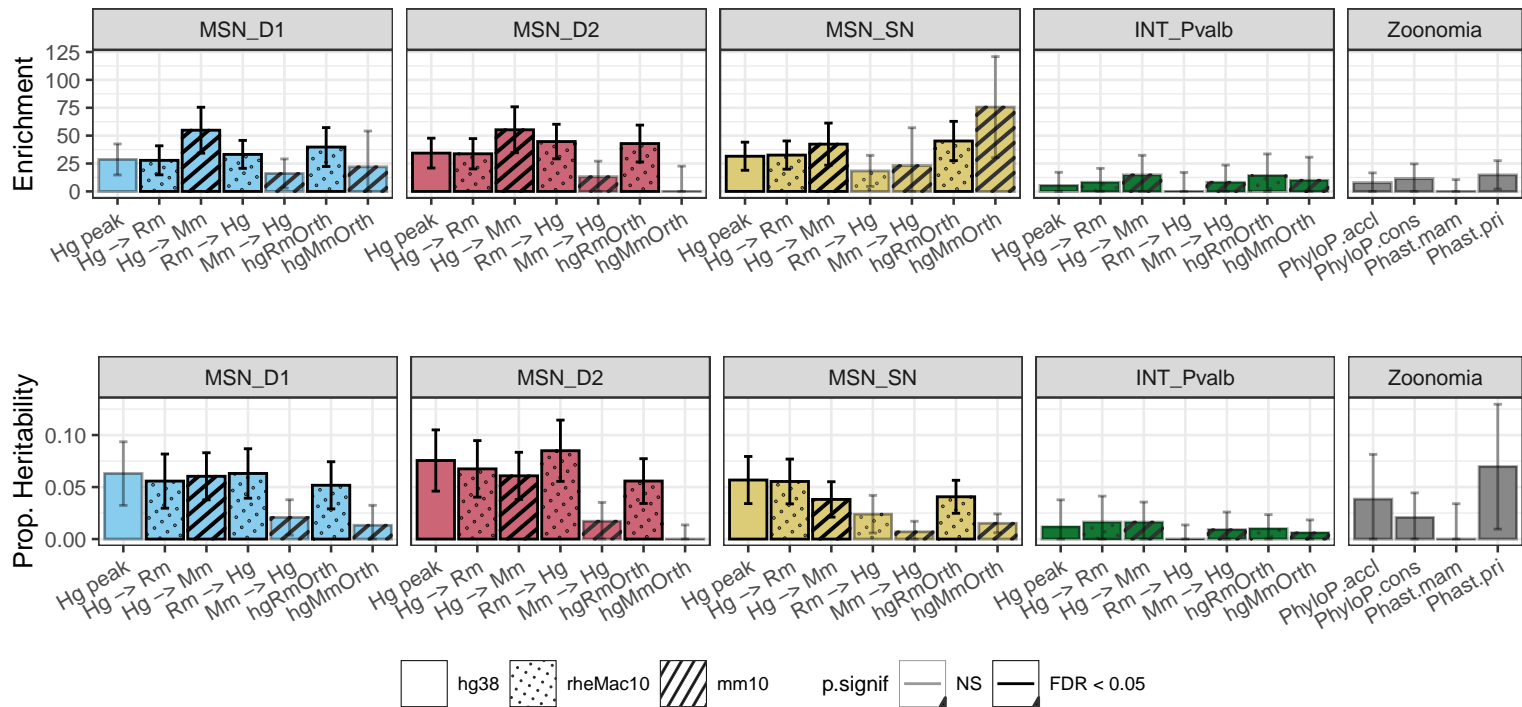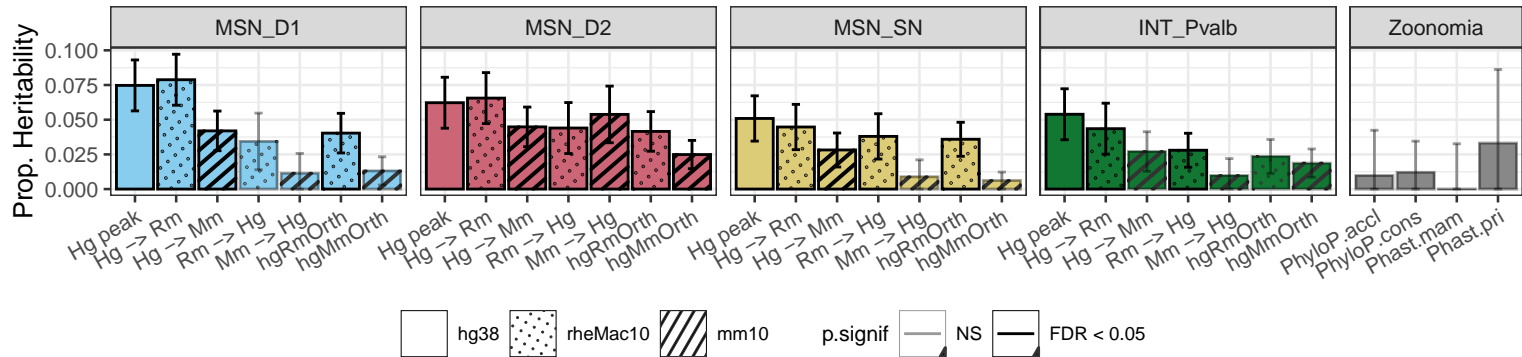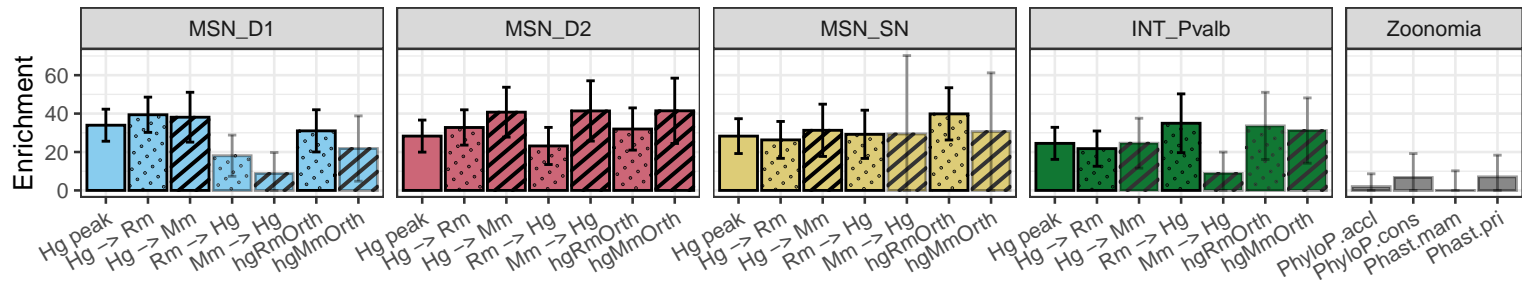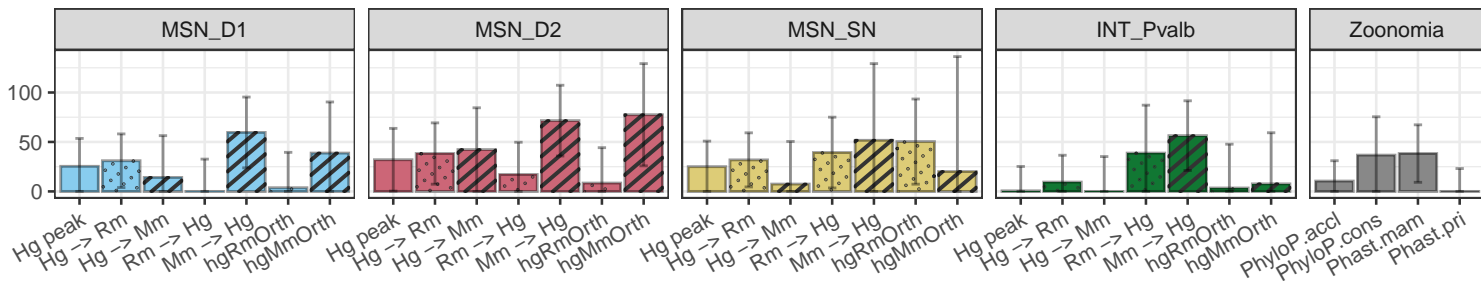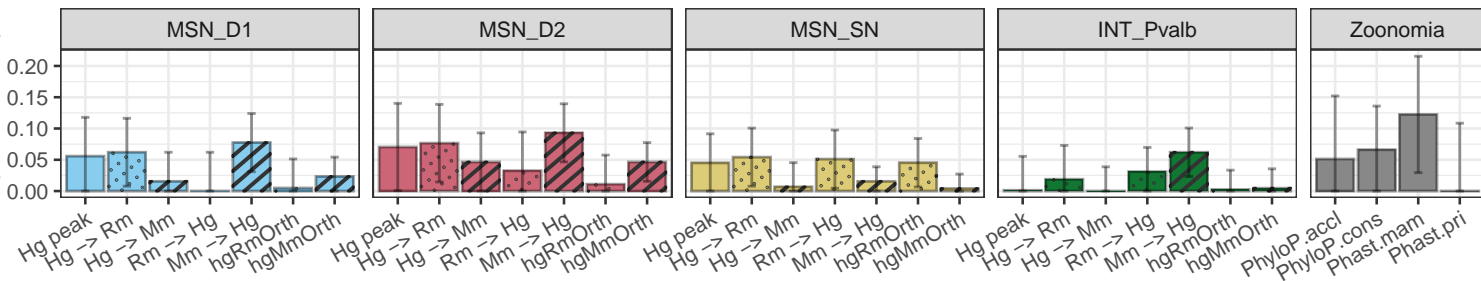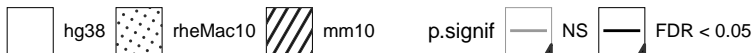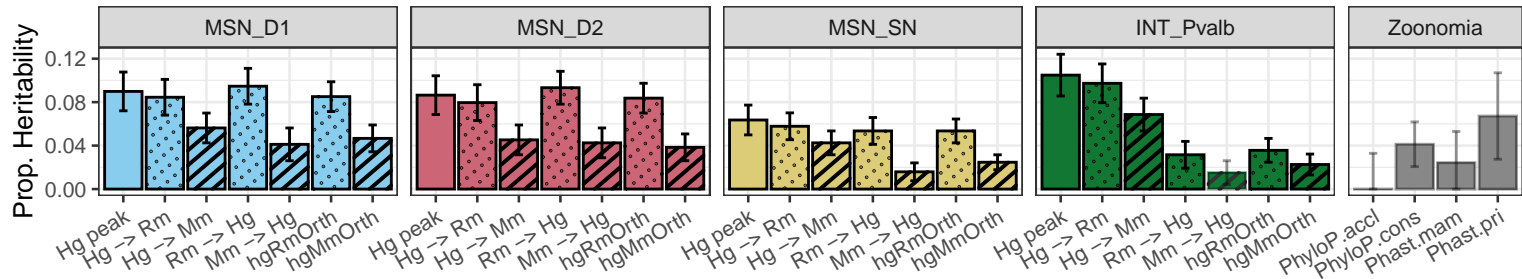**Top panel (Enrichment):** MSN_D1, MSN_D2, MSN_SN, INT_Pvalb, Zoonomia

**Bottom panel (Prop. Heritability):** MSN_D1, MSN_D2, MSN_SN, INT_Pvalb, Zoonomia

X-axis categories: Hg peak, Hg → Rm, Hg → Mm, Rm → Hg, Mm → Hg, hgRmOrth, hgMmOrth

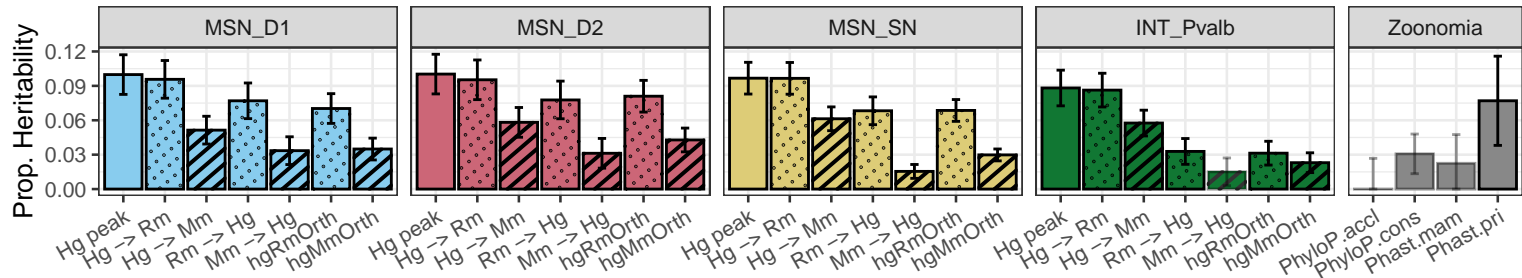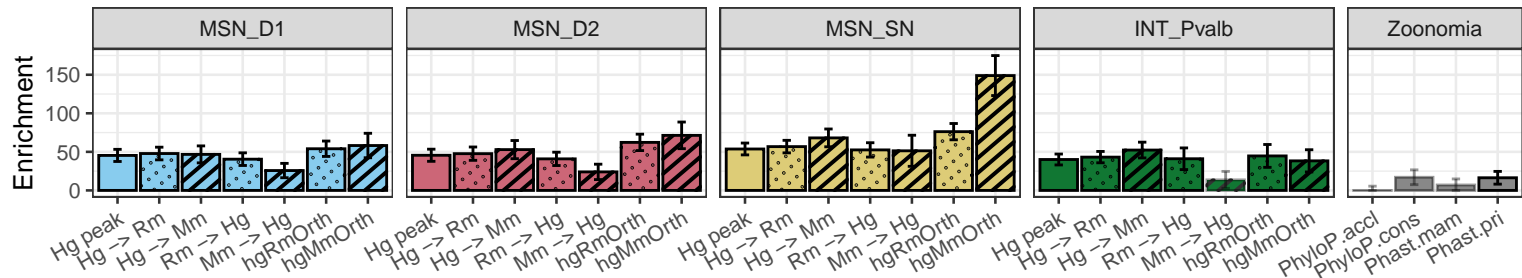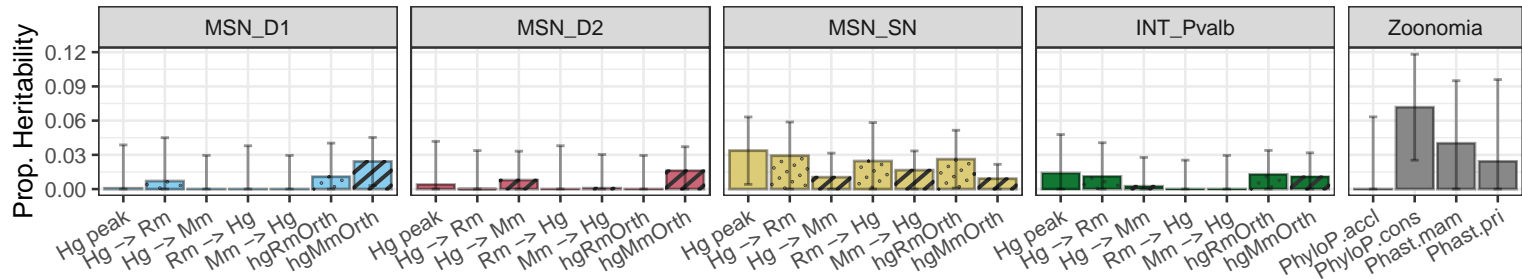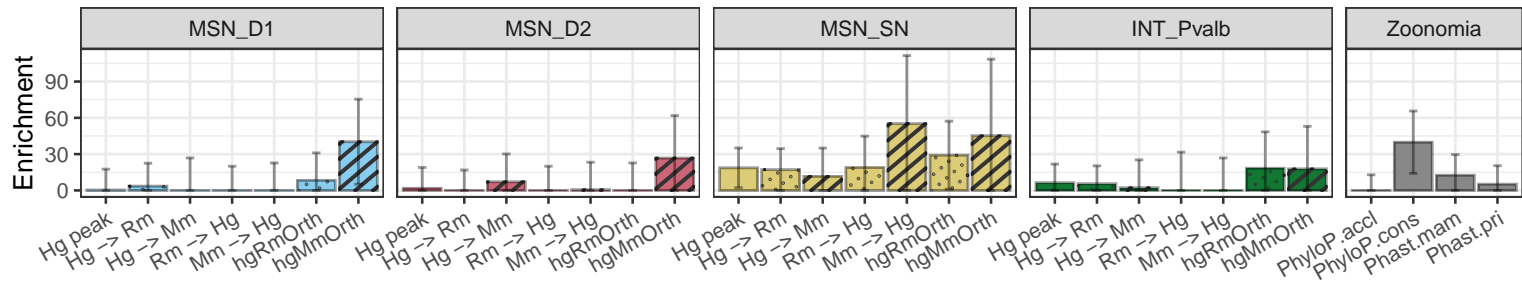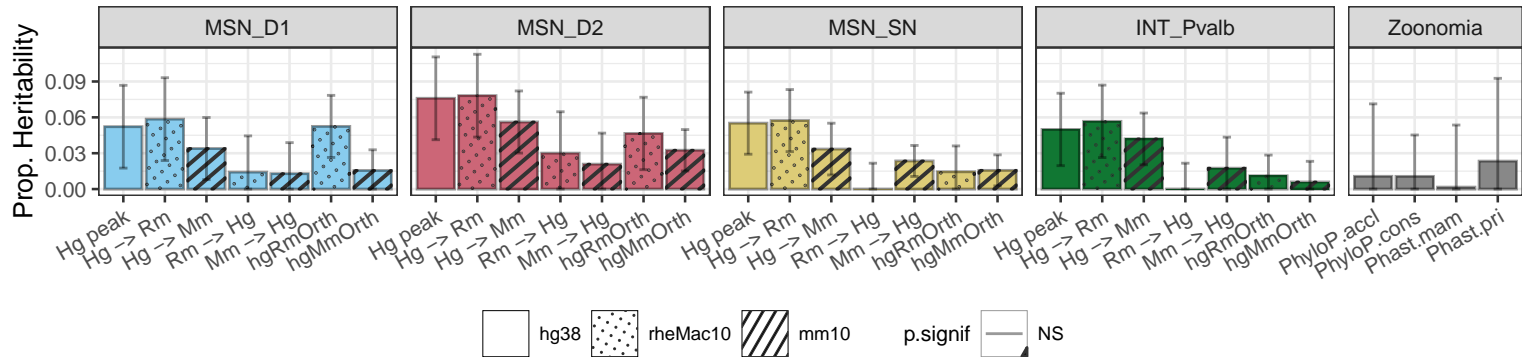Zoonomia categories: PhyloP.accl, PhyloP.cons, Phast.mam, Phast.pri

Legend: hg38, rheMac10, mm10, p.signif — NS, FDR < 0.05
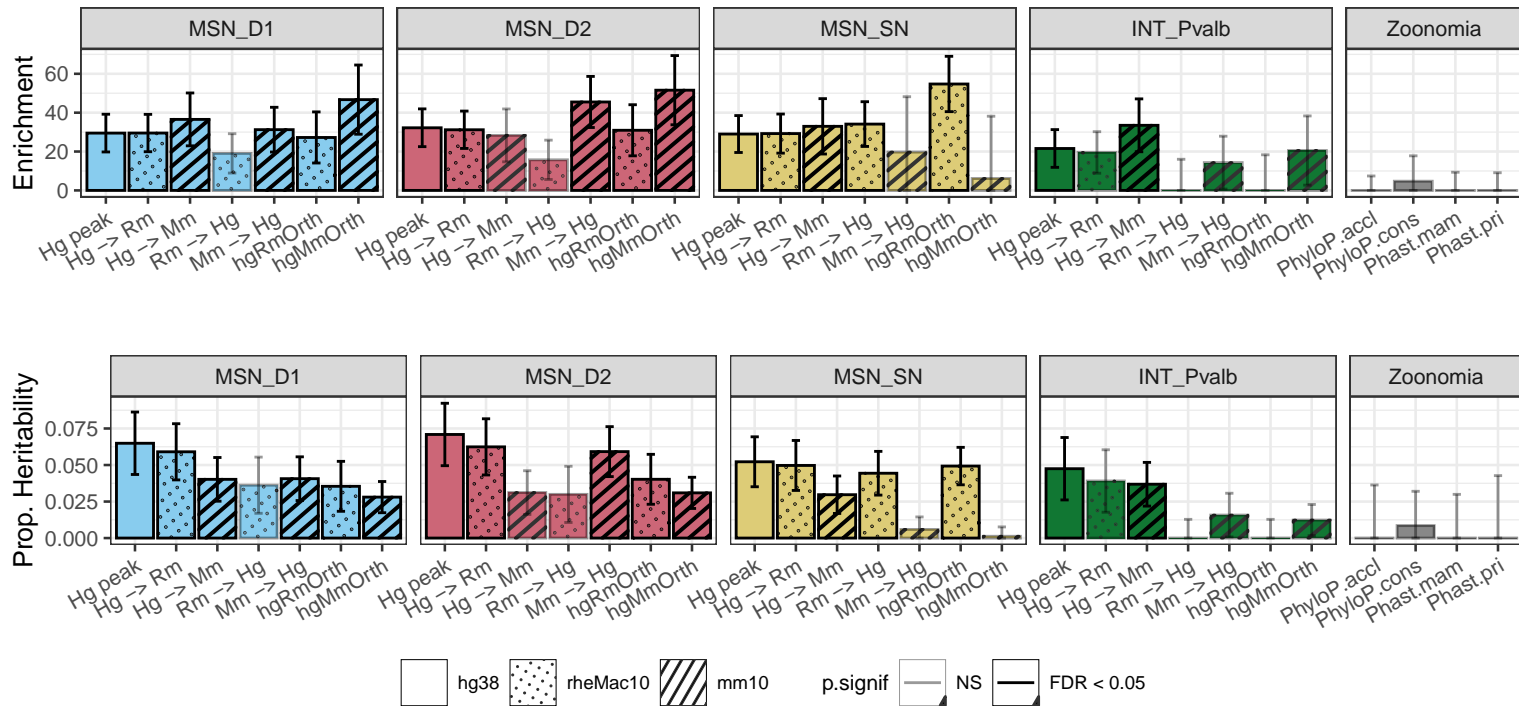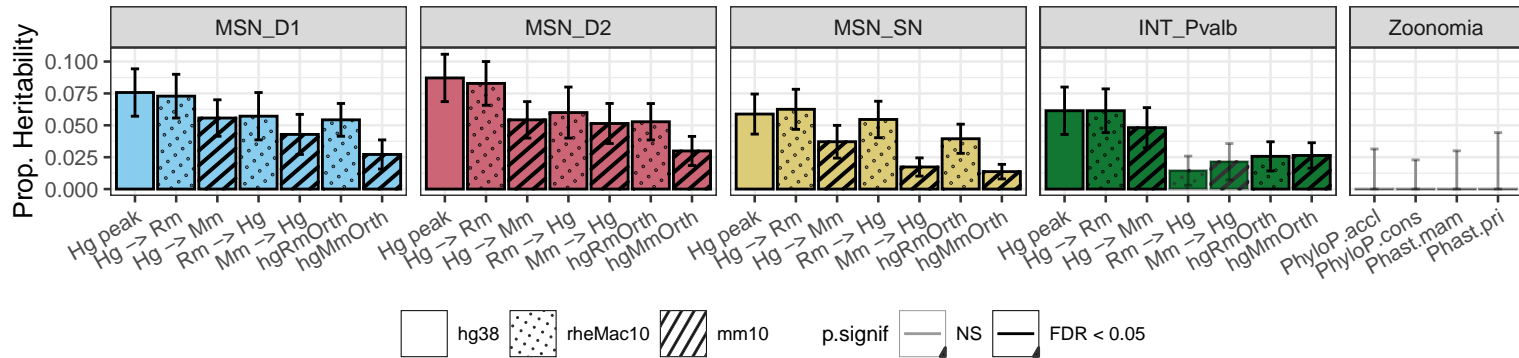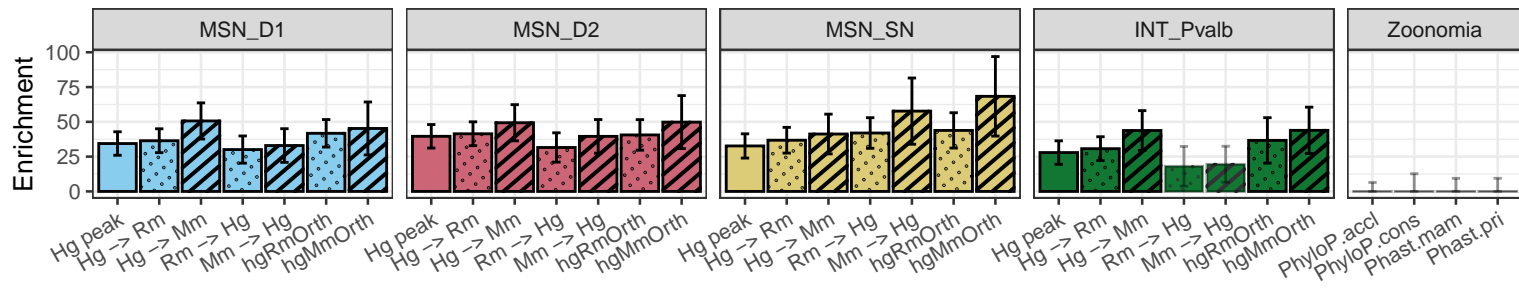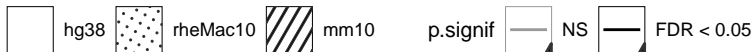
Trait: Snoring_E
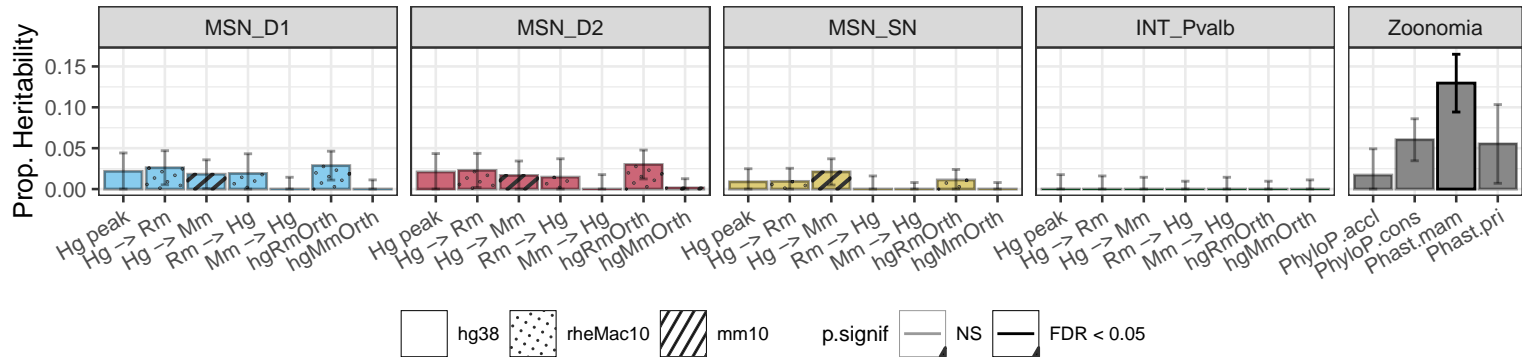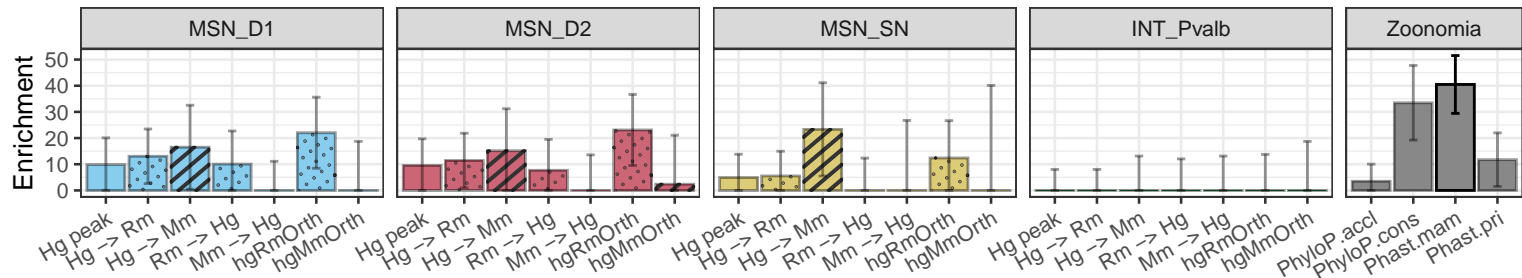
Trait: BloodUrea_E
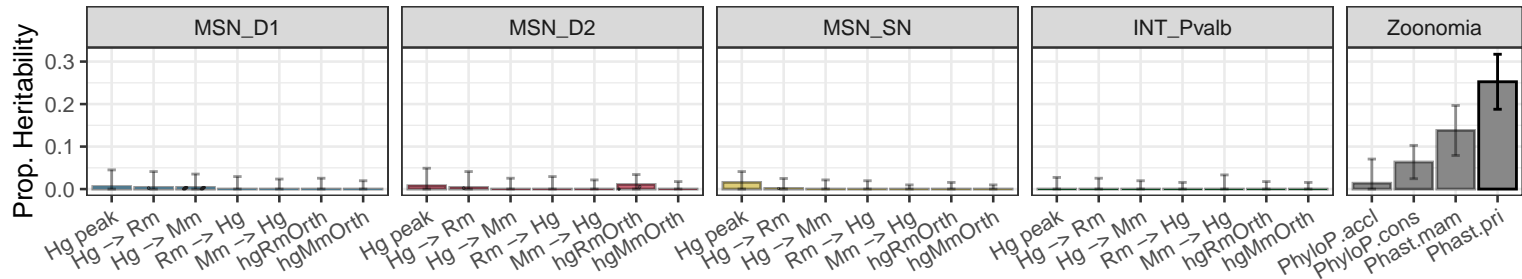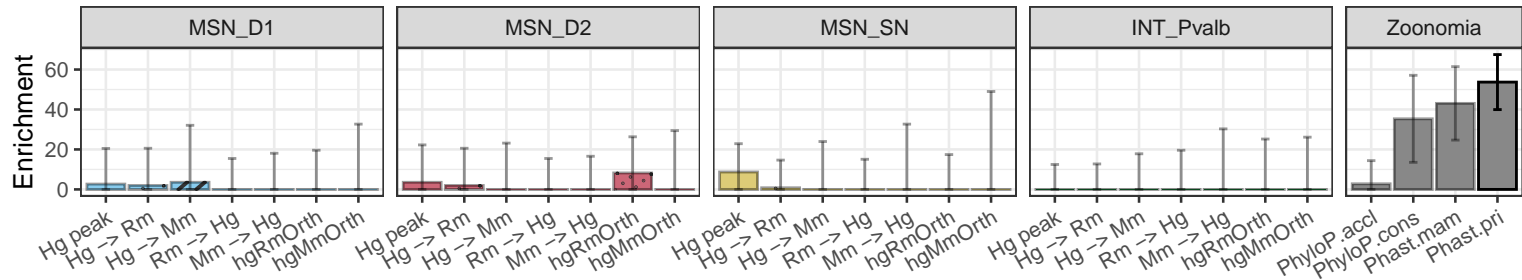
Trait: HDL_E

Trait: LDL_E

Trait: T2Diabetes_E

Trait: TotCholesterol_E

Trait: Triglycerides_E

Trait: BMD_E

Trait: CAD_E
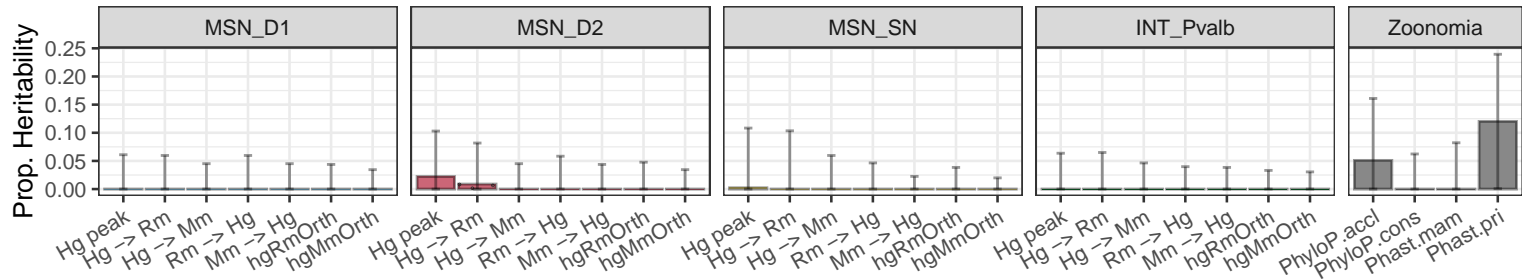
Trait: Height_E
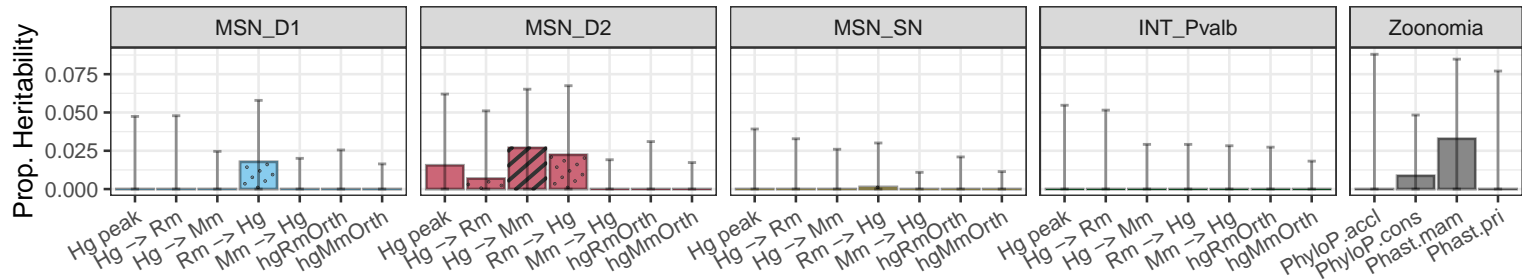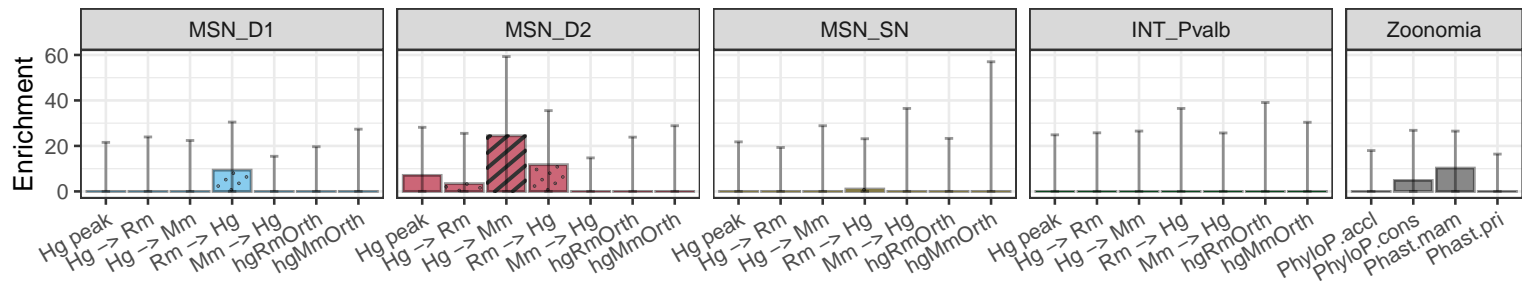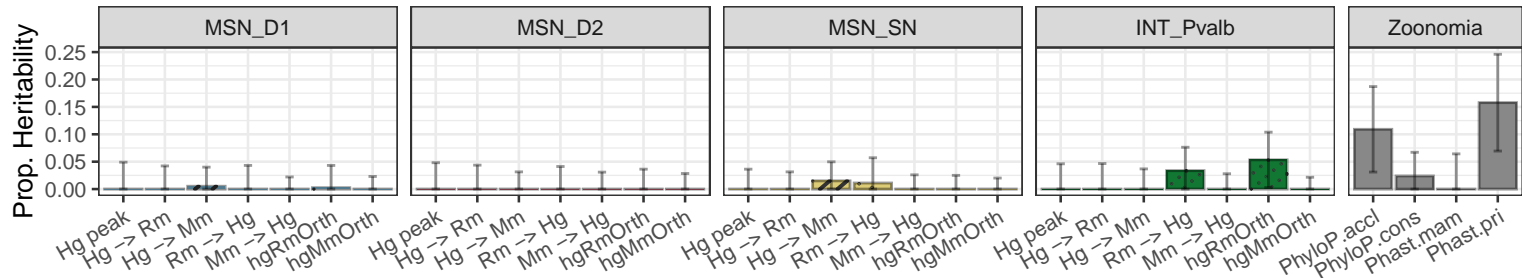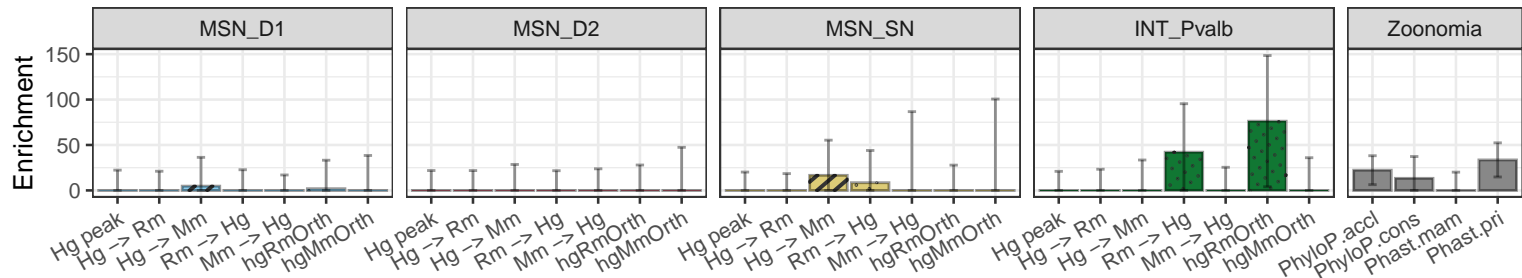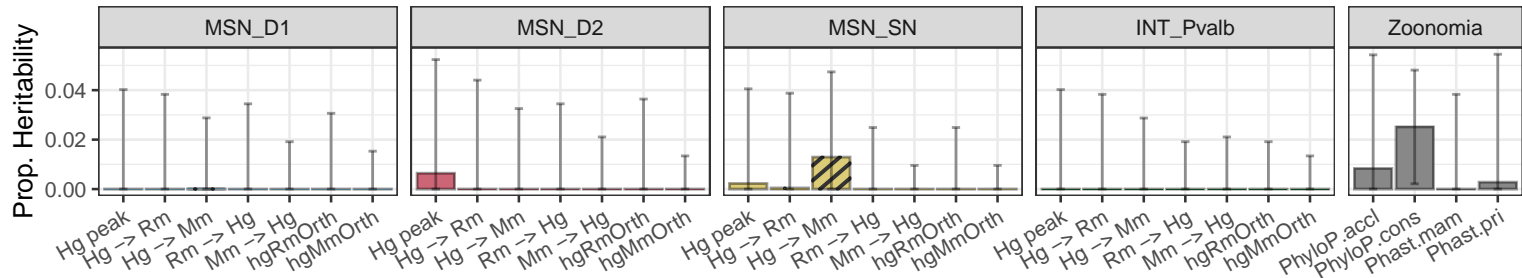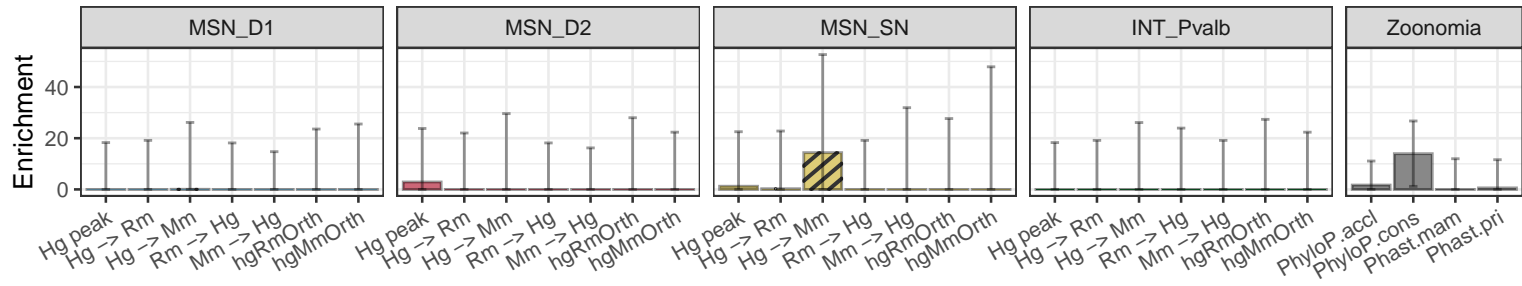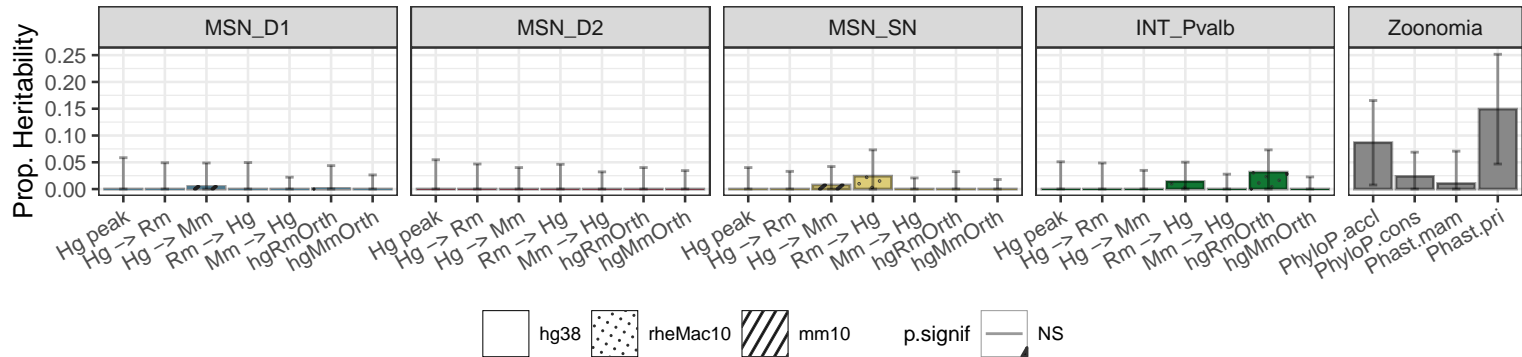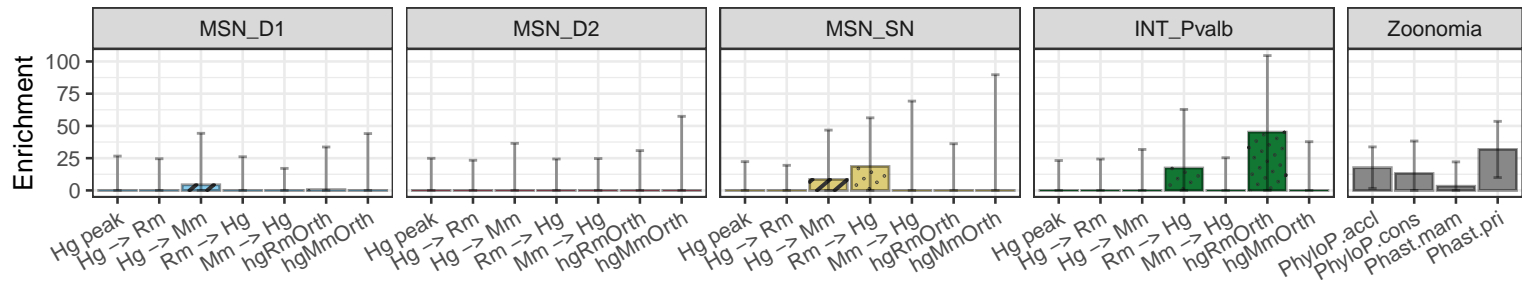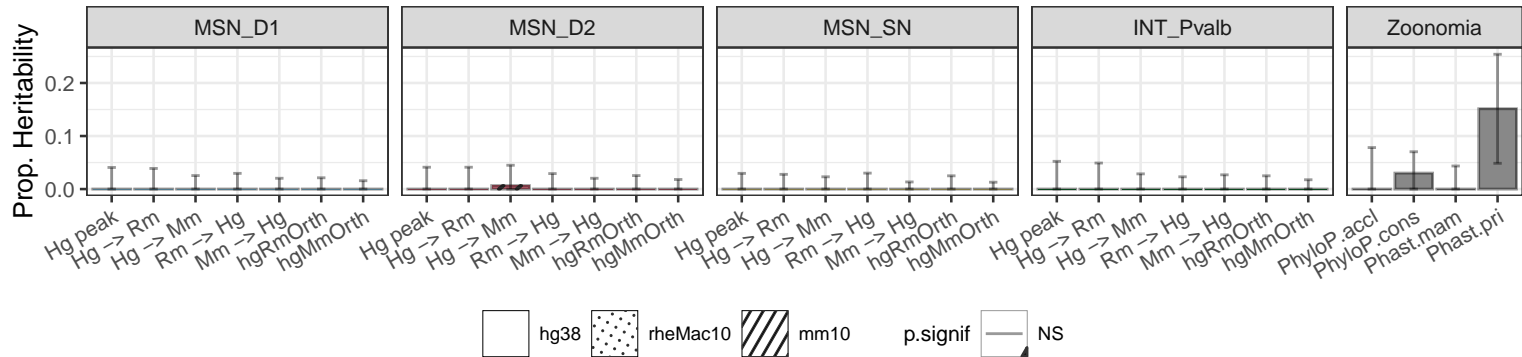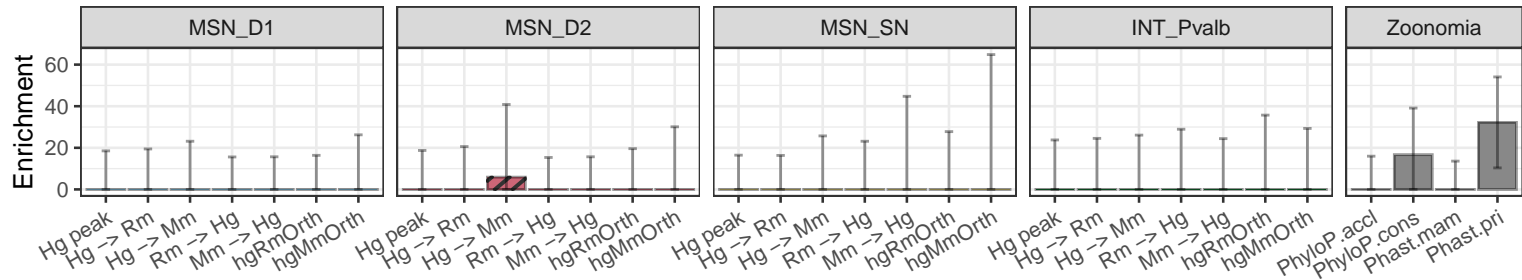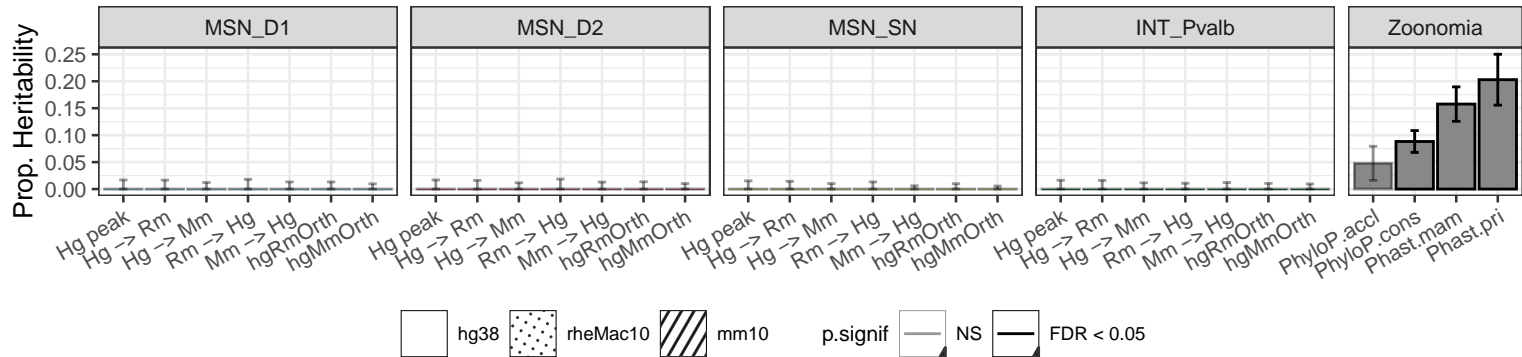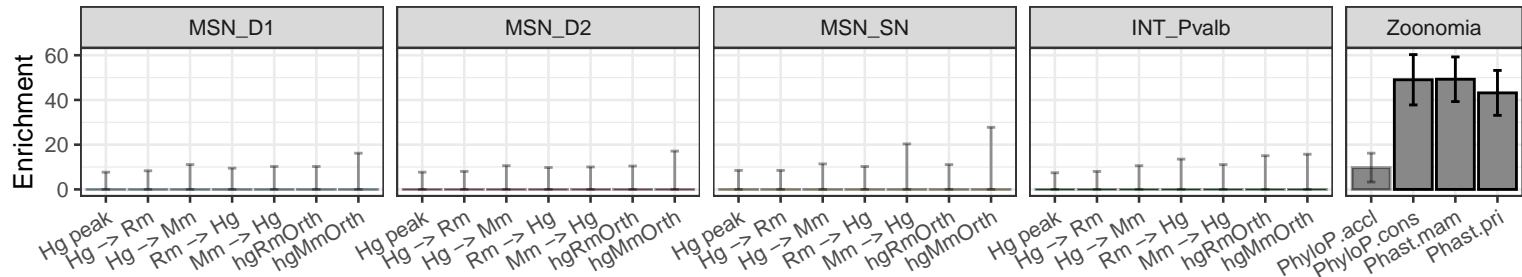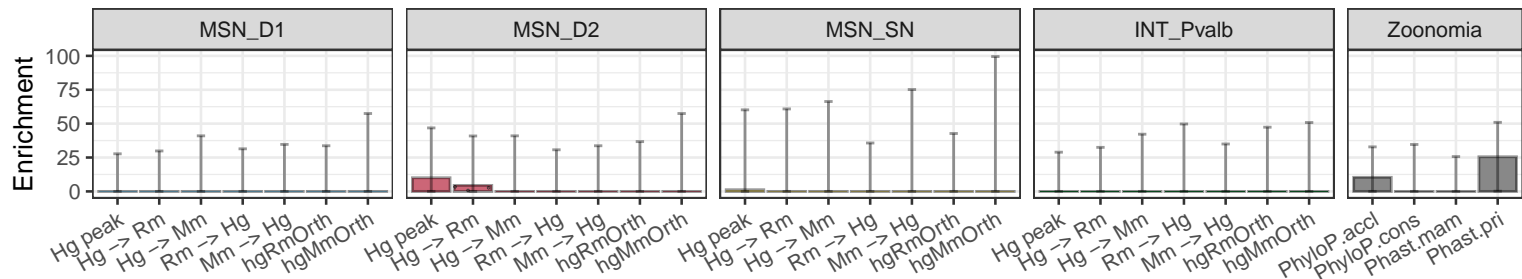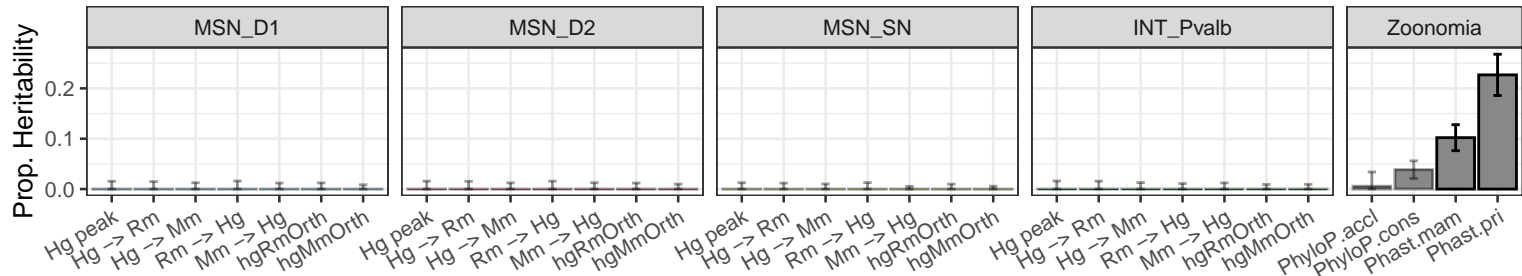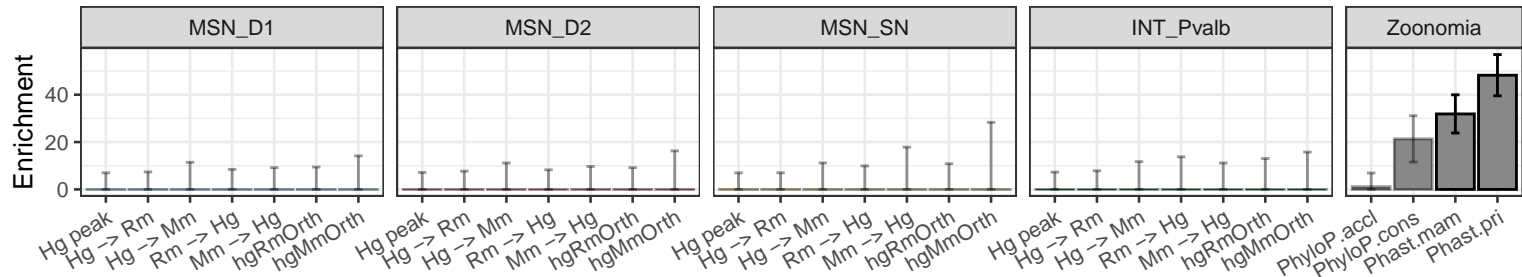
# Trait: LBM_E



Top panel (Enrichment, y-axis 0–120) with facets: MSN_D1, MSN_D2, MSN_SN, INT_Pvalb, Zoonomia.

x-axis labels for MSN panels: Hg peak, Hg → Rm, Hg → Mm, Rm → Hg, Mm → Hg, hgRmOrth, hgMmOrth

Zoonomia x-axis labels: PhyloP.accl, PhyloP.cons, Phast.mam, Phast.pri

Bottom panel (Prop. Heritability, y-axis 0.00–0.20) with same facets and x-axis labels.

Legend: ☐ hg38   ⠿ rheMac10   ▨ mm10   p.signif   — NS
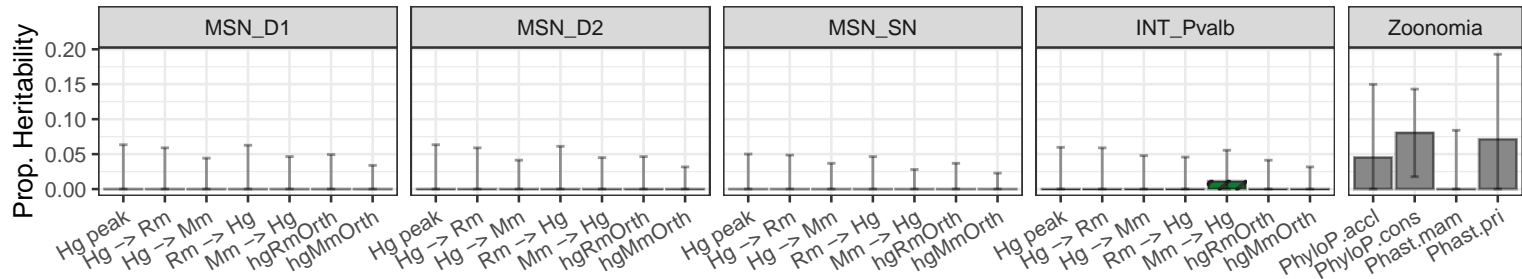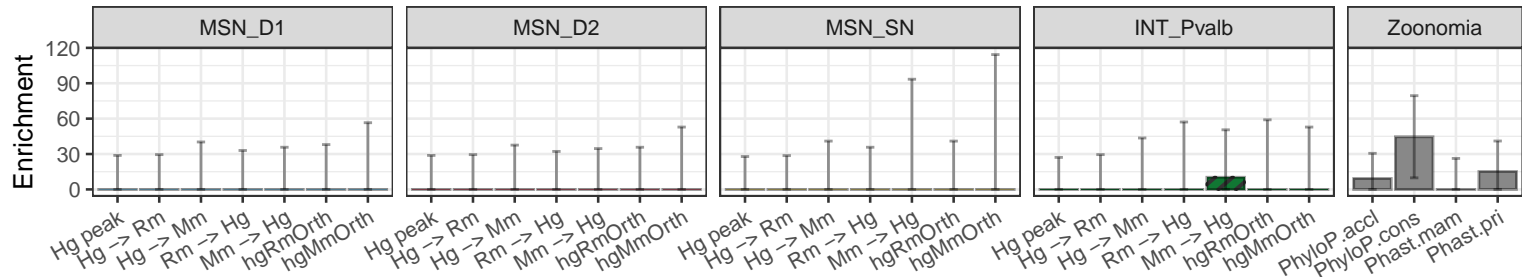
Trait: Longevity_E

Trait: WHRadjBMI_E