## environmental filtering experiment PD Gamma Beta 0.5 -1.0 -0.50.0 -1.0 -0.50.0 0.5 -1.0 -0.5 0.0 1.0 0.5 1.0 1.0 0.5 Sackin Yule.PDA.ratio **MRD** 0.5 -0.5 0.0 0.5 -0.5 0.0 0.5 -1.0 -0.50.0 0.5 1.0 -1.01.0 -1.01.0 1.0 PSV **MPD** mean.lprime 1.0 -0.5 0.0 0.5 1.0 -1.0 -0.50.0 0.5 -0.5 0.0 0.5 -1.01.0 -1.0 1.0

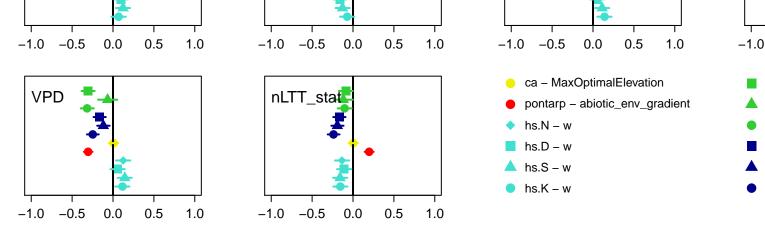
gen.K - niche\_strength

fh.3 - environment

fh.2 - environment

fh.1 - environment

gen.TEMPSP – niche\_strength



correlation coefficient

log10S

-0.5

-0.5

**VRD** 

Colless

-1.0

0.0

0.0

### niche conservatism experiment log10S PD Gamma Beta -1.0 -0.5 0.0 -0.50.0 0.5 0.5 -1.0 -0.5 0.0 0.5 -1.0 -0.50.0 0.5 -1.01.0 1.0 1.0 Yule.PDA.ratio Colless Sackin **MRD** -0.5 -0.5 0.0 0.5 1.0 0.0 0.5 1.0 -0.5 0.0 0.5 1.0 -1.0 -0.50.0 0.5 -1.0 1.0 **VRD PSV** mean.lprime **MPD** -0.5 0.0 0.5 1.0 -1.0 -0.5 0.0 0.5 1.0 -1.0 -0.50.0 0.5 1.0 -0.5 0.0 0.5 -1.0-1.0 hs.N - sigma\_E gen.K - mutation **VPD** nLTT\_stat gen.TEMPSP - mutation hs.D - sigma\_E gen.NULL - mutation hs.S - sigma\_E ca - Niche\_evolution hs.K - sigma\_E pontarp - mutation\_step

correlation coefficient

-1.0

-0.5

0.0

0.5

1.0

-0.5

-1.0

0.0

0.5

1.0

#### dispersal experiment log10S PD Gamma Beta 0.0 -0.5 0.0 -0.50.0 0.5 -1.0 -0.5-0.50.5 1.0 -1.0 0.5 1.0 -1.01.0 0.0 0.5 1.0 Yule.PDA.ratio Colless 3 Sackin **MRD** -0.5 0.0 0.5 -0.5 0.0 0.5 1.0 -0.5 0.0 0.5 -0.5 0.0 0.5 1.0 -1.0 -1.01.0 -1.0 1.0 **VRD PSV MPD** mean.lprime -0.5 0.0 0.5 1.0 -0.5 0.0 0.5 1.0 -0.5 0.0 0.5 -0.5 0.0 0.5 -1.0-1.01.0 -1.0 1.0 -1.0gen.K - dispersal\_scale xe - dispersal **VPD** ve – gam gen.K - dispersal\_shape nLTT\_stat ca - Dispersal\_alpha gen.TEMPSP - dispersal\_sc

ca - Dispersal\_P

hs.N - beta

hs.D - beta

hs.S - beta

hs.K - beta

pontarp - dispersal

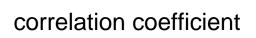
gen.TEMPSP – dispersal\_sr gen.NULL – dispersal\_scale

gen.NULL - dispersal\_shape

fh.3 - dispersal

fh.2 - dispersal

fh.1 - dispersal



-1.0

-0.5

0.0

0.5

1.0

-0.5

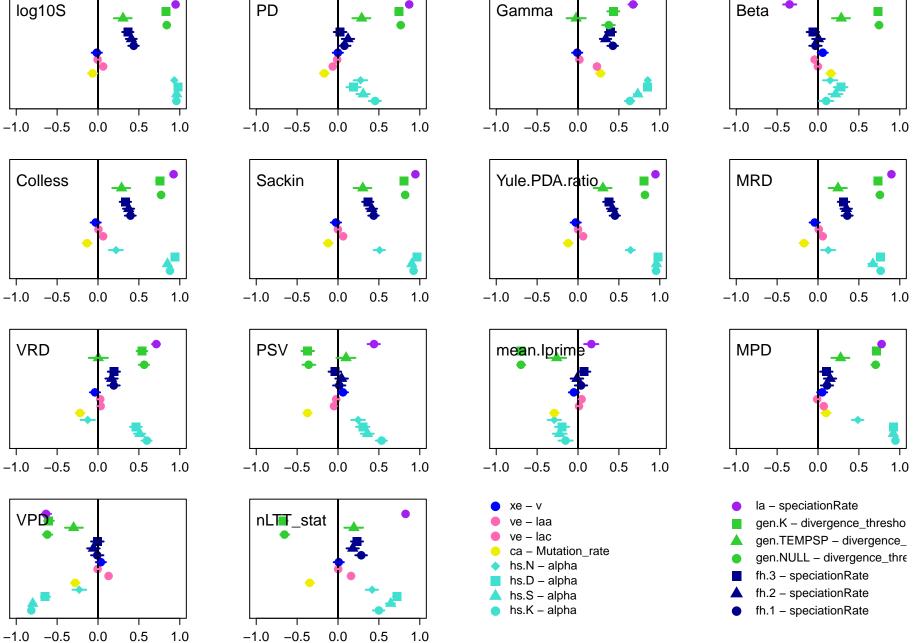
-1.0

0.0

0.5

1.0

# mutation/speciation rate experiment PD Gamma Beta



correlation coefficient

#### competition experiment log10S PD Gamma Beta 0.0 -0.5 0.0 0.5 -0.5 0.5 -0.50.0 0.5 -0.50.0 0.5 1.0 -1.0 1.0 -1.0 1.0 -1.0 1.0 Colless Yule.PDA.ratio Sackin **MRD** -0.5 -0.5 -0.5 0.0 0.5 1.0 0.0 0.5 1.0 -0.5 0.0 0.5 1.0 0.0 0.5 -1.0-1.0 **VRD PSV** MPD mean.lprime -0.50.0 0.5 1.0 -0.5 0.0 0.5 1.0 -1.0 -0.50.0 0.5 1.0 -0.5 0.0 0.5 1.0 -1.0-1.0-1.0xe - sig\_phi la - density **VPD** nLTT\_stat gen.K - abundance\_scale\_p xe – psi fh.3 - density ca - SppPool\_size fh.2 - density pontarp - biotic\_niche\_width fh.1 - density -0.5 0.0 1.0 -0.5 0.0 0.5 0.5 -1.0 1.0 -1.0

correlation coefficient