[GradientBoostingClassifier] Hypergeometric test: Collapsing analysis vs mantis-ml predictions
primary vs shuffle p-value:1.3735638330335397e-237

>> Focusing on significant area only:

primary -- area: 52.0
synonymous -- area: 64.13
common -- area: 32.24
shuffle -- area: 0.0
> primary / synonymous ratio: 0.81
> primary / shuffle ratio: NA

>> Entire area:

primary -- area: 424.3
synonymous -- area: 447.64
common -- area: 380.73
shuffle -- area: 50.37
> primary / synonymous ratio: 0.95
> primary / shuffle ratio: 8.42

Phred score from hypergeometric test
(significance increasing in positive direction)

Top 5.0% mantis-ml predicted genes

- - - p-val: 0.05
— primary
— synonymous
— common
— shuffle