**S9 Table: Estimated heterozygosity excess or deficit as calculated by the two-phase model in BOTTLENECK for regent honeyeaters captured in the wild for a) all loci** **together using the Wilcoxon test and b) measured heterozygosity (He) and heterozygosity at mutation-drift equilibrium (Heq) for each polymorphic locus.** An excess indicates a recent population size bottleneck.

a)

|  |  |
| --- | --- |
| **Pre-2000 Samples** |  |
| Probability (one tail for heterozygosity deficiency) | 0.161 |
| Probability (one tail for heterozygosity excess) | 0.862 |
| Probability (two tails for heterozygosity excess and deficiency) | 0.322 |
| **Post-2010 Samples** |  |
| Probability (one tail for heterozygosity deficiency) | 0.097 |
| Probability (one tail for heterozygosity excess) | 0.920 |
| Probability (two tails for heterozygosity excess and deficiency) | 0.193 |

b)

|  |  |  |  |
| --- | --- | --- | --- |
| **Population** | **Locus** | **He** | **Heq** |
| Pre-2000 | BMC1 | 0.908 | 0.891 |
|  | BMC2 | 0.371 | 0.480 |
|  | Pocco8 | 0.602 | 0.757 |
|  | Pn1 | 0.873 | 0.844 |
|  | Pn3 | 0.289 | 0.374 |
|  | Pn5 | 0.397 | 0.363 |
|  | Pn13 | 0.687 | 0.690 |
|  | Pn15 | 0.236 | 0.194 |
|  | Pn23 | 0.537 | 0.636 |
|  | HrU2 | 0.130 | 0.371 |
| Post-2010 | BMC1 | 0.910 | 0.887 |
|  | BMC2 | 0.266 | 0.423 |
|  | Pocco8 | 0.673 | 0.777 |
|  | Pn1 | 0.811 | 0.801 |
|  | Pn3 | 0.419 | 0.415 |
|  | Pn5 | 0.440 | 0.229 |
|  | Pn13 | 0.617 | 0.734 |
|  | Pn15 | 0.234 | 0.419 |
|  | Pn23 | 0.630 | 0.693 |
|  | HrU2 | 0.142 | 0.426 |