

**Supplementary Material 2** | Contingency tables of the frequency of animals within different classes of pedigree-based inbreeding coefficients ( $F_{PED}$ ) that fell within three categories (low, medium, and high) of genomics-based inbreeding coefficients ( $F_{SNP}$ , and  $F_{ROH}$ ) for the Ayrshire (AYR), Holstein (HST), and Jersey (JER) breeds.

Population	$F_{PED}$ class	$F_{SNP}$			$F_{ROH}$		
		Low	Moderate	High	Low	Moderate	High
<b>AYR</b>	0.000-0.050	160	20	89	134	126	9
	0.050-0.100	26	134	67	107	112	8
	>0.100	0	10	4	10	3	1
	<b>Total</b>	<b>186</b>	<b>164</b>	<b>160</b>	<b>251</b>	<b>241</b>	<b>18</b>
<b>HST</b>	0.000-0.050	293	39	4	153	173	10
	0.050-0.100	762	129	29	408	471	41
	>0.100	63	26	10	20	68	11
	<b>Total</b>	<b>1,118</b>	<b>194</b>	<b>43</b>	<b>581</b>	<b>712</b>	<b>62</b>
<b>JER</b>	0.000-0.050	0	1	422	31	276	116
	0.050-0.100	2	2	829	76	528	229
	>0.100	0	1	72	9	44	20
	<b>Total</b>	<b>2</b>	<b>4</b>	<b>1,323</b>	<b>116</b>	<b>848</b>	<b>365</b>