be regarded as the separate groups.

2.16 Statistical Analysis of Inbreeding Effect (2)

Following the foregoing analysis, Inbreeding Values of all the winners of the world's GI races held during the period from 2016 through 18 are newly analyzed. The total of the GI concerned is 1372, so that the results with the 1372 winners are shown in Chart 8 below (rounding to second decimal place).

Chart 8

Country of Breeding	Total of Winning	Average of IV (*1)	Median
Europe	315	**0.64**	0.49
Great Britain	91	**0.78**	**0.59**
		(excl.Enable) **0.56**	0.45
Ireland	160	**0.63**	0.49
France	38	0.51	0.44
Germany	26	0.39	0.35
North America	327	**0.57**	0.40
U.S.A.	316	**0.57**	0.40
Canada	11	0.34	0.20
South America	286	0.50	0.39
Argentina	132	0.45	0.30
Brazil	83	0.37	0.20
Chile	56	**0.82**	**0.69**
Peru	13	0.49	0.39
Uruguay	2	**0.60**	**0.60**
Oceania	281	0.48	0.39
Australia	190	0.47	0.30
New Zealand	91	0.50	0.40
South Africa	78	0.32	0.20
Japan	85	0.44	0.39
	Sum Total 1372	Total Average 0.53	

(*1) "IV" means Inbreeding Value, the unit of which is "%."
(*2) The shaded boldface is the value higher than the total average.

Please be aware that Enable won 7 GI races during the said period. The winners the Inbreeding Value of which are not less than 3.00 are only two; i.e. Enable (value: 3.43) and Sweet Loretta bred in U.S.A. winning 2016 Spinaway Stakes (value: 3.03). Meanwhile, this analysis is based on the "total number" of the winners, that is, suppose that there are 1372 winners individually. Thus, of the 91 winners bred in Great Britain, the 7 winners are considered given the value of 3.43 respectively, which means that Enable made the average of Great Britain extremely go up. Taking it into account, the values excluding Enable are also referred to.

Incidentally, as you may be aware, the values of the countries having small population, e.g. Uruguay, are not meaningful in themselves.

The following are from the aforesaid results with my opinion:

i) With the total average being 0.53, the inbreeding trend in the world is considered in the middle