（Chart 20） **Inbreeding Value of Winners in GI Races Held from 2022 to 2024 on Basis of Actual Winning Head**

Country of Breeding	Actual Winning Head	Average of IV	Median of IV
<u>Europe</u>	222	**0.57**	0.45
Great Britain	64	**0.57**	0.45
Ireland	109	**0.57**	0.40
France	36	**0.50**	0.40
Germany	13	**0.73**	(*) 0.78
<u>North America</u>	182	0.44	0.30
USA	180	0.44	0.30
Canada	2	0.45	0.45
<u>South America</u>	214	0.48	0.30
Argentina	95	**0.49**	0.30
Brazil	66	0.31	0.20
Chile	37	**0.64**	0.59
Peru	14	**0.66**	0.50
Uruguay	2	**1.19**	1.19
<u>Oceania</u>	181	0.48	0.39
Australia	111	0.47	0.39
New Zealand	70	**0.50**	0.39
South Africa	56	0.35	0.20
Japan	54	0.42	0.30
Total 909		0.48	0.39

1) The overall average of Inbreeding Values for the horses winning GIs held from 2022 to 2024 was slightly lower than that for the horses winning GIs held from 2016 to 2018. At any rate, the value concerned remained intermediate between 4×4 (≒0.39) and 3×4 (≒0.78), with the median being 0.39, as the same as the 4×4 value, for both the "winning total" and "actual winning head."

2) The European average remained relatively high not only for the period of 2016-18 but also for the period of 2022-24.

3) Despite the point mentioned in 2) above, the Germany's value was low in the 2016-18 results. I thought that Germany is not swayed by bloodline trends or brands, so that this was expected in a sense. However, the Germany's significantly higher value in the 2022-24 period was unexpected. I speculate that this is because Germany has a small sample size, which has decreased by about half compared to the 2016-18; thus it can be considered that the average value will rise quickly when a reasonable number of high-value horses are included.

4) In the 2016-18 period, no country had a median higher than the average, suggesting that a certain number of the high-value horses raised the average. In the 2022-24 period, however, Germany had a median higher than the average, as marked with (*). This is thought to be related to 3) above. Incidentally, Canada also has a median higher than the average on Chart 19, but with only three samples, this is not significant.

5) Among the South American countries, Chile and Peru have high values. Meanwhile, the average value of Argentina, which has a large population, is close to the overall average, and Brazil is quite low. As a result, the value of South America as a whole is close to the overall average. Note