

Supplementary file 1. The tables below contain data used in the small bar charts within the maps (Figures 1 and 2). Kebbi state samples were collected from one location, i.e Birnin Kebbi hence the alleles distributions were for Birnin Kebbi. Also Katsina samples were collected from one location i.e Kankia so also the alleles distribution. This data can be found in Table 2 of the main text.

Table 1. Distribution of *Pfprt* alleles in the senatorial districts of Kano State.

Senatorial Districts	Number Examined	<i>Pfprt</i> K76		<i>Pfprt</i> 76T		<i>Pfprt</i> K76T	
		K76	Non-K76	76T	Non-76T	K76T	Non-K76T
N-S (Gaya)	17	5 (29.4)	12 (70.6)	1 (5.9)	16 (94.1)	0 (0.0)	17 (100.0)
N-W (Gwarzo)	31	5 (16.1)	26 (83.9)	7 (22.6)	24 (77.4)	1 (3.2)	30 (96.8)
N-C (Municipal)	5	3 (60.0)	2 (40.0)	1 (20.0)	4 (80.0)	0 (0.0)	5 (100.0)
Total	53	13 (24.53)	40 (75.47)	9 (16.98)	44 (83.02)	1 (1.89)	52 (98.11)
	Chi square	4.799		2.207		0.723	
	df	2		2		2	
	P value	0.091ns		0.332ns		0.697ns	

Table 2. Distribution of *Pfmdr1* alleles in the senatorial districts of Kano State.

Senatorial Districts	Number Examined	<i>Pfmdr1</i> N86		<i>Pfmdr1</i> 86Y	
		N86	Non-N86	86Y	Non-86Y
N-S (Gaya)	17	10 (58.8)	7 (41.2)	1 (5.9)	16 (94.1)
N-W (Gwarzo)	31	17 (54.8)	14 (45.2)	5 (16.1)	26 (83.9)
N-C (Municipal)	5	1 (20.0)	4 (80.0)	0 (0.0)	5 (100.0)
Total	53	28 (52.83)	25 (47.17)	6 (11.32)	47 (88.68)
	Chi square	2.458		1.853	
	df	2		2	
	P value	0.293ns		0.396ns	

Table 3. Distribution of *pfert* alleles in the senatorial districts of Jigawa State.

Senatorial Districts	Number Examined	<i>Pfert</i> K76		<i>Pfert</i> 76T		<i>Pfert</i> K76T	
		K76	Non-K76	76T	Non-76T	K76T	Non-K76T
N-W (Garki)	14	1 (7.1)	13 (92.9)	2 (14.3)	12 (85.7)	0 (0.0)	14 (100.0)
N-C (Kiyawa)	17	2 (11.8)	15 (88.2)	5 (29.4)	12 (70.6)	2 (11.8)	15 (88.2)
N-E (Maigatari)	12	5 (41.7)	7 (58.3)	4 (33.3)	8 (66.7)	3 (25.0)	9 (75.0)
Total	43	8 (18.60)	35 (81.40)	11 (25.58)	32 (74.42)	5 (11.63)	38 (88.37)
	Chisquare	5.954		1.448		3.931	
	df	2		2		2	
	P value	0.051ns		0.485ns		0.140ns	

Table 4. Distribution of *pfmdr 1* alleles in the senatorial districts of Jigawa State.

Senatorial Districts	Number Examined	<i>Pfmdr1</i> N86		<i>Pfmdr1</i> 86Y	
		N86	Non-N86	86Y	Non-86Y
N-W (Garki)	14	3 (21.4)	11 (78.6)	10 (71.4)	4 (28.6)
N-C (Kiyawa)	17	9 (52.9)	8 (47.1)	3 (17.6)	14 (82.4)
N-E (Maigatari)	12	5 (41.7)	7 (58.3)	1 (8.3)	11 (91.7)
Total	43	17 (39.53)	26 (60.47)	14 (32.56)	29 (67.44)
	Chisquare	3.221		14.562	
	df	2		2	
	P value	0.200ns		0.001**	

Table 5. Distribution of *pfert* alleles in the senatorial districts of Kaduna State.

Senatorial Districts	Number Examined	<i>Pfert</i> K76		<i>Pfert</i> 76T		<i>Pfert</i> K76T	
		K76	Non-K76	76T	Non-76T	K76T	Non-K76T
N-S (Doka)	30	9 (30.0)	21 (70.0)	5 (16.7)	25 (83.3)	1 (3.3)	29 (96.7)
N-W (Zaria)	18	6 (33.3)	12 (66.7)	4 (22.2)	14 (77.8)	2 (11.1)	16 (88.9)
N-C (Kawo)	5	2 (40.0)	3 (60.0)	1 (20.0)	4 (80.0)	0 (0.0)	5 (100.0)
Total	53	17 (32.08)	36 (67.92)	10 (18.87)	43 (81.13)	3 (5.66)	50 (94.34)
	Chisquare	0.217		0.231		1.606	
	df	2		2		2	
	P value	0.897ns		0.891ns		0.448ns	

Table 6. Distribution of *pfmdr1* alleles in the senatorial districts of Kaduna State.

Senatorial Districts	Number Examined	<i>Pfmdr1</i> N86		<i>Pfmdr1</i> 86Y	
		N86	Non-N86	86Y	Non-86Y
N-S (Doka)	30	12 (40.0)	18 (60.0)	7 (23.3)	23 (76.7)
N-W (Zaria)	18	4 (22.2)	14 (77.8)	3 (16.7)	15 (83.3)
N-C (Kawo)	5	2 (40.0)	3 (60.0)	0 (0.0)	5 (100.0)
Total	53	18 (33.96)	35 (66.04)	10 (18.87)	43 (81.13)
	Chisquare	1.675		1.611	
	df	2		2	
	P value	0.433ns		0.447ns	