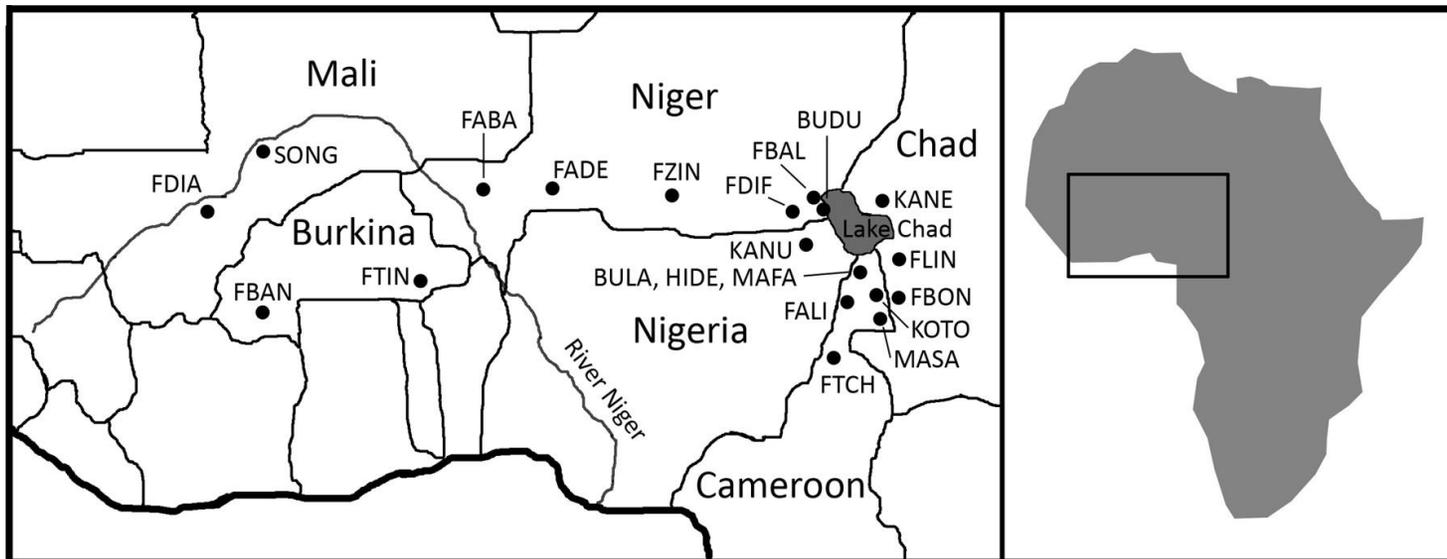


## Haplotypes of Fulani Pastoralists, Revised

Important Note about the subject: In the early days of our research of E1a1, the only place we could find much E1a1 in Africa was among the Fulbe (Fulani) in northern Cameroon. Of 17 samples reported by Scozzari et al. in 1999, 9 were E1a1. However, we dismissed the finding as an anomaly. Little did we realize, then, that we were getting a glimpse of something important in the region.

We now have new information from two studies, the first based on the second: “Multiple and Differentiated Contributions to the Male Gene Pool of Pastoral and Farmer Populations of the African Sahel,” published in 2013 by Jana Buckova, et al.; and “Genetic Structure of Pastoral and Farmer Populations in the African Sahel,” published in 2011 by Viktor Cerny, et al. In all, 11 Fulani pastoralist groups from the 5 African countries of Cameroon, Chad, Niger, Burkina Faso and Mali were tested, as well as 10 groups of farmers. Of the 21 groups, 14 were located around Lake Chad. The remaining 7 were located to the west of the lake. The farmer tribes’ names can be seen on the map below. A code for the Fulani pastoralists, specified by location, is found in the Cerny study:

<http://in-africa.org/wp-content/uploads/2012/12/Cerny-et-al-2011-MBE-genetic-structure-of-pastoral-and-farmer-pops-in-the-African-Sahel.pdf>



The Fulani comprise what is probably the largest ethnic population of Africa, a significant part of which is nomadic. Though they are spread over many countries today and found primarily in West Africa, Central Africa, and in Egypt and Sudan, they probably made their move into Central Africa from West Africa in the 11<sup>th</sup> century (Cerny et al., 2011). Before that, they may very well have been resident farther north. In the words of the authors of the Buckova study:

“The origin of Sahelian pastoralism has been located to the central Sahara area on both iconographic and archaeological grounds (Lhote,1973; Dupuy, 1999). Several authors have even suggested that some of the paintings and engravings found in the rocky shelters of the Tassili n’Ajjjer Mountains in southeast Algeria have been produced by direct Fulani ancestors (Dupire, 1962; Ba and Dieterlen, 1966).”

The Fulani are known by many different names and have diverse cultures. Over centuries and, perhaps, millenia, their movement has been primarily from north to south. Those who studied them extensively in the first half of the last century have affirmed a connection with Judaism, often referring to them as Judeo-Syrians. Their lighter skin tone and Caucasian features, as well as a portion of their y-dna, suggests contact with West Eurasia at some point in their distant past.

It is the Fulani pastoralist statistics that occupy most of the space on these pages because this is where E1a1 was found. The farmer groups, while carrying E1a, showed no E1a1. In trying to explain the differences between the two groups, study authors have suggested that mating exchanges must have been quite limited.

1. Places and the Str Pattern:

Places:	Samples	Positive
Diafarabe in Mali	24	1
Banfora in Burkina Faso	26	4
Abala in Niger	21	1
Balatungur in Niger	13	1
Bongor in Chad	25	1
Linia in Chad	11	1
<u>393</u>	<u>390</u>	<u>19</u>
<u>391</u>	<u>385ab</u>	<u>426</u>
	<u>388</u>	<u>439</u>
		<u>389a</u>
		<u>392</u>
		<u>389b</u>
13	22	15
9		9
	12	
		12
		12
		30

\*\*\*\*\*

2. Place and the Str Pattern:

Place:	Samples								Positive		
Tcheboua in Cameroon	22								1		
	393	390	19	391	385ab	426	388	439	389a	392	389b
	13	22	16	9			12		12	12	29

\*\*\*\*\*

3. Places and the Str Pattern:

Places:	Samples								Positive		
Tcheboua in Cameroon	22								4		
Zinder in Niger	17								1		
Bongor in Chad	25								1		
Linia in Chad	11								2		
	393	390	19	391	385ab	426	388	439	389a	392	389b
	13	22	16	9			12		12	12	30

\*\*\*\*\*

4. Places and the Str Pattern:

<u>Places:</u>		<u>Samples</u>						<u>Positive</u>		
Zinder in Niger		17						1		
Linia in Chad		11						2		
<u>393</u>	<u>390</u>	<u>19</u>	<u>391</u>	<u>385ab</u>	<u>426</u>	<u>388</u>	<u>439</u>	<u>389a</u>	<u>392</u>	<u>389b</u>
13	22	17	9			12		12	12	30

\*\*\*\*\*

Of 206 total samples of Fulani Pastoralists:

E1a\* or a subclade of E1a other than E1a1 - 4  
E1a1 - 21 for a percentage of 10.2%

One haplotype that could have been E1a1 because of DYS391=9 and DYS392=12 was omitted, since a couple of the DYS numbers had never been seen before among E1a1 samples.

\*\*\*\*\*

The abstract of the study of Jana Buckova et al., 2013 makes this observation about the y-dna of the pastoralists:

“Interestingly, within the Fulani pastoralist population as a whole, a differentiation of the groups from Niger is characterized by their high presence of R1b-M343 and E1b1b1-M35. Moreover, the R1b-M343 is represented in

our dataset exclusively in the Fulani group and our analyses infer a north-to-south African migration route during a recent past.”

The implication here might well be to suggest not only “a north-to-south migration,” but also a connection with the Jews through E1b1b1-M35, since this particular mutation is one of the top 3 for Ashkenazis. The percentage for E1b1b1-M35 among the 206 pastoralists was more than 18% and for R1b-M343, more than 7%.

Written by Robert E. Hall

E1a1 Haplogroup

July 16, 2015