

Common Epidemiology of *Rickettsia felis* Infection and Malaria, Africa

Technical Appendix

Technical Appendix Table. Rural health centers and laboratories that participated in study of epidemiology of *Rickettsia felis* Infection and malaria, featuring the demography, geography, and climate of the study regions*

Country and study site (site abbreviation)	Region/department/district	Population size	Climate,vegetation	Annual precipitation, mm	Village	Coordinates	Other activities
Senegal Dielmo-Ndiop (S ₁ -S ₂)	Toubacouta/Foundiougne/Fatick	120,554	Sudanian†, wooded savannah	939	Dielmo	13°43'N, 16°24'W	Point-of-care laboratory
					Ndiop	13°41'N, 16°23'W	None
Keur Momar Sarr (S ₃)	Keur Momar Sarr/Louga/Louga	70,743	Sahelian‡,steppe-type	400	Keur Momar Sarr	15°55'N, 15°58'W	DNA extraction
					Loboudou	15°57'N, 15°55'W	None
					Ganket Balla	15°58'N, 15°55'W	None
Niakhar (S ₄)	Niakhar/Fatick/Fatick	69,446	Sahelo-Sudanian§, wooded steppe	757	Toucar	14°32'N, 16°28'W	None
					Diohine	14°30'N, 16°30'W	None
					Ngayokheme	14°32'N, 16°26'W	None
					Niakhar	14°28'N, 16°23'W	DNA extraction
Basse Casamance (S ₅)	Loudia-Oulof/Oussouye/Ziguinchor	57,505	Sub-Guinean¶, primary and secondary gallery forests	1,432	Mlomp	12°33'N, 16°34'W	DNA extraction
					Kagnout	12°33'N, 16°37'W	None
					Elinkine	12°30'N, 16°39'W	None
Kedougou (S ₆)	Bandafassi/Kedougou/Kedougou	20,021	Sudano-Guinean#, woodland, wooded savannah	1,189	Bandafassi	12°32'N, 12°18'W	DNA extraction
					Ibel	12°30'N, 12°22'W	None
					Tiabeji	12°38'N, 12°25'W	None

Country and study site (site abbreviation)	Region/department/district	Population size	Climate,vegetation	Annual precipitation, mm	Village	Coordinates	Other activities
Mali Diankambou (M ₁)	Mopti	11,333	Sahelian, savannah	580	–	14°35'N; 3°05'W	DNA extraction
Kole–M ₂	Sikasso	3,508	Sudano-Guinean, savannahs, forest	700–1,500	–	10°5'N; 7°20'W	DNA extraction
Gabon Franceville (G)	Mpassa/Haut-Ogooué	56,000	Equatorial**, savannah and tropical forest	1,862	–	1°37'S; 13°34'E	DNA extraction
Algeria Oran	Oran Province	18,682,000	Semi-arid climate, halophytic vegetation	326	–	35°41'N 0°37'W	None
Morocco Kenitra	Gharb-Chrarda-Béni Hssen	1,859,540	Mild Mediterranean climate, woody flora	750	Sidi Mohamed Lahmar Sidi Taybi	34°15'N 6°35'W	None
Tunisia Sfax	Sfax Governorate	2,256,320	Mediterranean climate, wild grasses	465	–	36°48'N 10°11'E	None
France Marseille	Provence-Alpes-Côte d'Azur	1,582,000	Mediterranean climate, Mediterranean maquis shrubland††	515	–	43°17'N 5°22'E	DNA extraction

*–, no participants at village level; NA, not applicable.

†Sudanian, tropical semi-arid climate with a mean annual precipitation between around 600 and 800 mm.

‡Sahelian, tropical semi-arid climate with a dry season mainly during the coldest 6 months of the year and a mean annual precipitation ≈200–400 mm.

§Sahelo-Sudanian tropical semi-arid climate with a mean annual precipitation ≈400–600 mm.

¶Sub-Guinean, tropical monsoon maritime climate characterized by the changing of dry and wet seasons; mean annual precipitation rate ≈1200–1500 mm.

#Sudano-Guinean, transitory climate between Sudanian and sub-Guinean climates; annual precipitation ≈ 800–1200 mm.

**Equatorial, a climate with no dry season; mean precipitation values of all months are ≥60 mm.

††Maquis, a shrubland biome in the Mediterranean region, typically consisting of densely growing evergreen shrubs such as holm oak, Kermes Oak, tree heath, strawberry tree, sage, juniper, buckthorn, spurge olive. and myrtle.