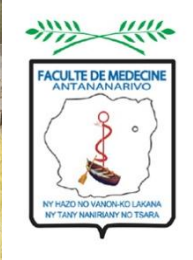


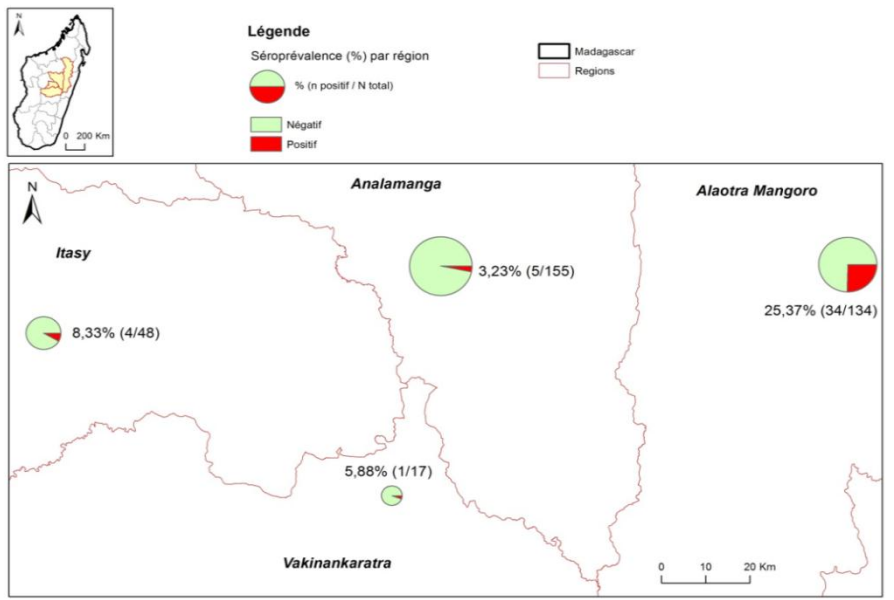
Seroprevalence and risk factors associated with West Nile Virus infection in wild birds in 4 regions of Madagascar

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- **West Nile virus** : zoonotic arbovirus of birds which can affect Humans and horses, endemic in Madagascar but never studied in wild bird populations
- Serological survey of 354 birds from 4 regions of Madagascar in 2016-7
- **Seroprevalence: 12.5%** (44/352) of birds [95%CI: 11.0-14.0] (belonging to 19/41 species)

Seroprevalence by region:



Logistic regression model: risk factors

Variables		OR	95% CI OR	p
Constant		0,002	9.10 ⁻⁰⁵ -0,02	
Proximity to wetlands	Yes	1		0,021
	No	8,19	1,2-165,1	
Order	Others order	1		0,023
	Ciconiiformes	2,5	0,3-29,5	
	Passeriformes	4,99	1,6-16,2	
Region	Analamanga	1		5,01.10 ⁻⁰⁶
	Itasy	9,2	1,2-115,3	
	Vakinankaratra	1,6	0,03-41,6	
	Alaotra-Mangoro	41,4	6,2-610,7	
Distribution area	Widespread	1		0,0002
	Endemic to Indian Ocean	2,6	0,5-14,3	
	Endemic to Madagascar	1,1	0,28-4,8	
	Africa	31,9	5,46-313,1	

AUC ROC: 0,856

→ **Need to build mixed models to take into account individual and species level variables**