

**Rare genetic admixture and unidirectional gene flow between  
*Vipera aspis* and *Vipera berus* at their contact zone in western  
France**

Valerie Zwahlen<sup>1,\*</sup>, Olivier Lourdais<sup>2</sup>, Sylvain Ursenbacher<sup>1,3</sup>, Gaëtan Guiller<sup>4</sup>

1 - Department of Environmental Sciences, Section of Conservation Biology,

University of Basel, St. Johannis-Vorstadt 10, 4056 Basel, Switzerland

2 - Centre d'Études Biologiques de Chizé, CNRS UMR 7372, 79360 Villiers en Bois,

France

3 - info fauna – CSCF & karch, Avenue Bellevaux 51, 2000 Neuchâtel, Switzerland

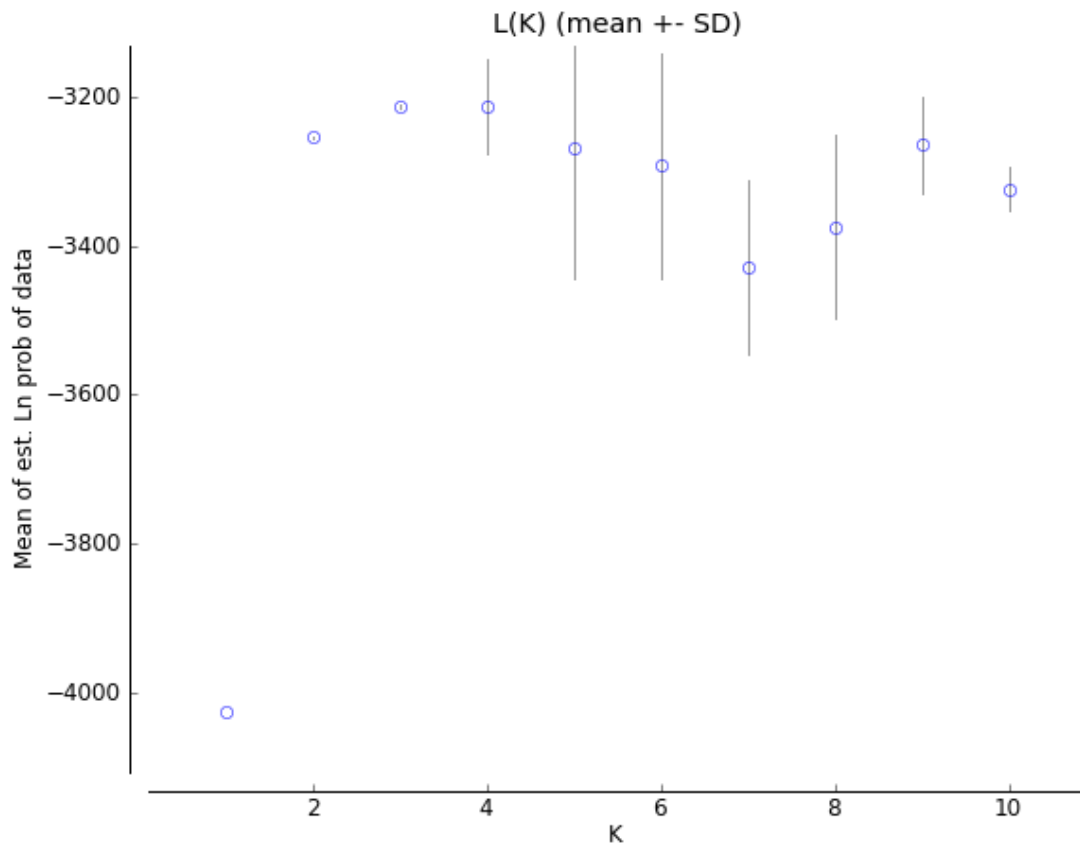
4 - Le Grand Momesson, 44130 Bouvron, France

\*Corresponding author; e-mail: valerie.zwahlen@hotmail.com

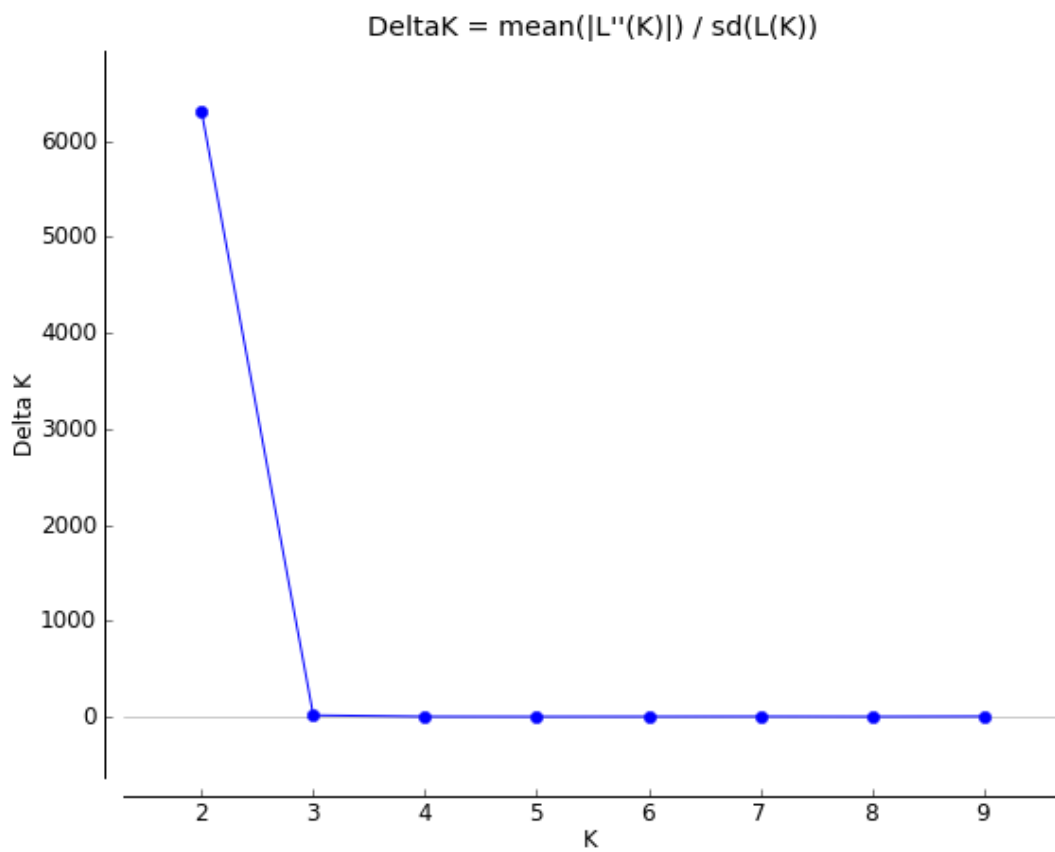
ORCID iDs: Zwahlen: 0000-0002-8744-5621; Lourdais: 0000-0001-7840-103X;

Ursenbacher: 0000-0001-5093-6403

**Supplementary material**



**Figure S1.** Result of the log-likelihood obtained from StructureHarvester; the lowest value of K after a considerable increase in the mean log-likelihood  $L(K)$  shows the most probable number of  $K = 2$ .



**Figure S2.** Result of  $\Delta K$  method obtained from StructureHarvester, the highest value of  $\Delta K$  shows the most probable number of  $K = 2$ .