

## Review R1 PCI in Zoology

First detection of herpesvirus and frequency of mycoplasma infection in free-ranging Hermann's tortoises (*Testudo hermanni*), and in potential pet vectors (Ballouard J-M et al.) R1

Query: 1 animal was positive in Mycoplasma PCR (see reference Lecis et al. 2011 on line 417).

Answer: we emphasize that we clearly distinguish native free-ranging individuals from other categories. In Lecis et al. 2011 the tortoise tested positive was kept in enclosure before sampling (Centro Fauna Bonassai, Sassari, Italy), and thus cannot be considered as a native free-ranging tortoise.

I disagree with your interpretation:

- Lecis et al. 2011 state: "In this study, all individuals were sampled upon arrival at the center; therefore, local bacterial transmission through direct contact with already housed chelonians is unlikely."
- The origin of the PCR-positive animal was Arzachena, about 100 km from the centre in Olmedo.
- In my opinion, this animal was sampled before it was kept in an enclosure in the centre and was not infected by another animal in the centre.

Query: Line 261-263: the reference of Mathes et al. 2001 does not say that the free-ranging animals were negative for herpesvirus.

Answer: Mathes et al. 2001 did not find positive test for herpes virus in free-ranging tortoises, but reported a case from captivity.

I disagree with your interpretation: it is not clear in this reference which percentages belong to the captive or free-ranging group

P 3 line 59: the reference of Jacobson et al. 1991 is not in the list of references

P 4 line 91: Frankham not Franckam

P 10 line 287: 8.7.5% should be 8.7%

P 10 line 295: 9.6% should be 9.7%

P 10 line 306: Mathes et al.2001 is not corroborating your statement "... only one case known ... natural populations..."

P 11 line 376: the number for free-ranging WHT =  $34/391 = 8.7\%$  according to Table 2

P 12 line 378-380: "... some species to form resistant biofilms in vitro ...": this is only speculative, as the reference of McAuliffe does not include *M. agassizii*

P 12 line 380-381: I suggest rephrasing; e.g. "If *M. agassizii* would be able to form resistant biofilms in the environment, this may contribute to its persistent circulation even under ..."

P 12 line 552: delete "more than"

P 12 line 557: delete one "5.2%" and "(X and reovirus)"

P 12 line 559-561: the reference of Brianti et al. 2010 mentions that ".. infected by ticks, which can be infected by ..." and "... *Hyalomma aegyptium* has been implicated in the transmission of ...", but they did not actually examine their ticks for the pathogens in their study. Thus, this reference is not

corroborating your statement "... a wide range of pathogens has been observed in captive chelonians..."

P 13 line 596: the reference of Jacobson 1994 describes herpesvirus in 1 captive desert tortoise and 1200 imported Argentine tortoises. Thus, this reference is not corroborating your statement about free-ranging chelonians in North America

P 13 line 596: delete "Berish et al., 2000"; this reference is not in the reference list either

P 20 line 782: this reference of Marschang et al. 2009 is not in the text

P 21 line 807: this reference of Origgi et al, 2001 is not in the text

P 26 line 878 Table 2:

- $7/400 = 1.8$  not 1.7
- $4/11 = 36.4$  not 36.3
- $52/560 = 9.3$  not 9.2
- twice: 1(100) not (100)

P 27 line 881: delete N=457 so that it reads "... infections of free-ranging tortoises in ..."; the total number of 457 is confusing in this table, as the total number of tests is 300 and 448 for TeHV and *Mycoplasma*, respectively