

Erratum to: Persistent aryl hydrocarbon receptor inducers increase with altitude, and estrogen-like disrupters are low in soils of the Alps

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In the following paper the units of the yeast estrogen bioassay were by mistake changed from the real unit: “ng 17 β -estradiol EQ g $^{-1}$ dry soil” to “pg 17 β -estradiol EQ g $^{-1}$ dry soil”.

This causes the following important changes in the text:

The online version of the original article can be found at <http://dx.doi.org/10.1007/s11356-010-0361-8>.

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Abstract

Page 2: $0.37 \pm 0.12 \text{ ng } 17\beta\text{-estradiol EQ g}^{-1} \text{ dry soil}$
Instead of: $0.37 \pm 0.12 \text{ pg } 17\beta\text{-estradiol EQ g}^{-1} \text{ dry soil}$

Conclusion Low bioassay responses with a higher relative amount of ER disrupters than AhR inducers were detected, indicating the higher abundance of estrogen-like than persistent dioxin-like compounds in these forested areas.

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Instead of: Low bioassay responses with a higher relative amount of AhR inducers than ER disrupters were detected, indicating the higher abundance of persistent dioxin-like than estrogen-like compounds in these forested areas.

Materials and Methods

2.3 Genetically modified yeast bioassay

Page 4: The LOD is 0.03 **ng** 17 β -estradiol EQ g⁻¹ dry soil, whereas the LOQ is 0.05 **ng** 17 β -estradiol EQ g⁻¹ dry soil.

Instead of: The LOD is 0.03 pg 17 β -estradiol EQ g⁻¹ dry soil, whereas the LOQ is 0.05 pg 17 β -estradiol EQ g⁻¹ dry soil.

Results

Table 1:

Estrogenic activity (**ng** 17 β -estradiol EQ g⁻¹ dry soil)

LOQ Estrogenicity 0.05 **ng** 17 β -E EQ g⁻¹ dry soil

Estrogenicity (**ng** 17 β -E EQ g⁻¹ dry soil)

Instead of:

Estrogenic activity (pg 17 β -estradiol EQ g⁻¹ dry soil)

LOQ Estrogenicity 0.05 pg 17 β -E EQ g⁻¹ dry soil

Estrogenicity (pg 17 β -E EQ g⁻¹ dry soil)

3.2 Yeast-based bioassay

Page 7:...whereas the mean values obtained in the present study are 0.37±0.12 **ng** 17 β -estradiol EQ g⁻¹ dry soil...

Instead of:

:...whereas the mean values obtained in the present study are 0.37±0.12 pg 17 β -estradiol EQ g⁻¹ dry soil...

... but the higher relative amounts of ER disrupters than AhR inducers is obvious, pointing out the higher abundance of estrogen-like inducers than persistent dioxin-like compounds ... Instead of:... but the higher relative amounts of AhR inducers than ER disrupters is obvious, pointing out the higher abundance of persistent dioxin-like compounds than estrogen-like inducers ...

“...whereas the Alpine area had a ratio of around **0.016**.”

Instead of: “...whereas the Alpine area had a ratio of around 16.”

Conclusions

Finally, ER disrupters were found at low concentrations in these Alpine areas.

This statement can only be verified in function of future research in this area with environmental soil samples. The current research is most based on environmental sediment matrices that are in the same range or clearly above the here presented values. However, based on the available literature regarding soils, the only work found based in the study of estrogenicity of environmental soils (Xiao et al., 2006) pointed out noticeably lower values than the here obtained soil estrogenicity values.

Instead of:

Finally, ER disrupters were found at low concentrations in these Alpine areas.