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Journal Name:	International Journal of Plant & Soil Science
Manuscript Number:	2013_IJPSS_8206
Title of the Manuscript:	Effect of bulk and nano cobalt on barley seedlings and remediation of CoCl ₂ toxicity using NaOCl
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	<p>The title should be changed to Effect of aqueous solutions of macro- and nano-particles of cobalt on germination and growth of barley.</p> <p>There was nothing in the Introduction, Materials and Methods to indicate that the study included the detoxifying effect of NaOCl on CoCl₂. This is a very big omission. The introduction should include a little review of detoxifying effect of NaOCl on heavy metals. The Materials and Method should contain the procedure used by the authors to investigate the effect of application of NaOCl on the toxicity of COCl₂ on Barley.</p> <p>The difference between cobalt oxide (pure) and nano- cobalt oxide is the particle size. If the larger particulate- cobalt oxide is called pure does it mean that the nano-particulate cobalt oxide is impure ?. So all the places where cobalt oxide (pure) or bulk cobalt oxide is used should be replaced with macro-particles of cobalt oxide.</p> <p>In Material and Method, the sand used for the study was washed with 0.1 N HCl. After washing with the acid, the soil should be washed with deionised water before the soil is dried. The authors should give reason why they did not was the soil with deionised water after washing with 0.1 N HCl.</p> <p>Line 101. The MDA content in H vulgare should be replaced with The MDA content in treated H. vulgare.</p>	<p>The title should be changed to Effect of aqueous solutions of macro- and nano-particles of cobalt on germination and growth of barley</p> <p>Since macro and nano particles of co are not soluble in water, the title has been changed to Germination and growth of barley seedlings in sand cultures amended with macro- and nano- particles of cobalt (II,III) oxide and cobaltous chloride</p> <p>2. There was nothing in the Introduction, Materials and Methods to indicate that the study included the detoxifying effect of NaOCl on CoCl₂. This is a very big omission. The introduction should include a little review of detoxifying effect of NaOCl on heavy metals. The Materials and</p>



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		<p>Method should contain the procedure used by the authors to investigate the effect of application of NaOCl on the toxicity of COCl₂ on Barley.</p> <p>As suggested the brief introduction and method describing the detoxification process of COCl₂ via NaOCl is added in the text.</p> <p>3. The difference between cobalt oxide (pure) and nano- cobalt oxide is the particle size. If the larger particulate-cobalt oxide is called pure does it mean that the nano-particulate cobalt oxide is impure? So all the places where cobalt oxide (pure) or bulk cobalt oxide is used should be replaced with macro-particles of cobalt oxide.</p> <p>As suggested, the corrections have been made.</p> <p>4. In Material and Method, the sand</p>
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		<p>used for the study was washed with 0.1 N HCl. After washing with the acid, the soil should be washed with deionised water before the soil is dried. The authors should give reason why they did not was the soil with deionised water after washing with 0.1 N HCl.</p> <p>Although we had washed sand thrice with deionised water after treating with 0.1N HCl, yet it was not mentioned in the text. The same has been incorporated in the text now.</p> <p>5. Line 101. The MDA content in H vulgare should be replaced with The MDA content in treated H. vulgare.</p> <p>As pointed out, the necessary corrections have been made.</p>
<u>Minor</u> REVISION comments	None	
<u>Optional/General</u> comments	None	