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# Responses of *Landoltia punctata* to cobalt and nickel: removal, growth, photosynthesis, antioxidant system and starch metabolism

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## HIGHLIGHTS

- The physiological and biochemical responses of *Landoltia punctata* 0202 after exposure to cobalt and nickel were investigated.
- *Landoltia punctata* was a potential hyperaccumulator of both cobalt and nickel.
- A starch content of 53.3% DW could be realized at 5 mg L<sup>-1</sup> Co<sup>2+</sup>.
- Cobalt and nickel generally increased the AGPase and SSS activities and decreased the  $\alpha$ -amylase activity.
- The high metal tolerance of *Landoltia punctata* was partly derived from the efficient regulation of antioxidant enzymes and the high flavonoid content.

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