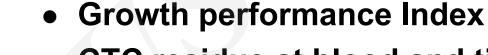
<u>Cite this as</u>: Bin LI, Jin-qiu ZHANG, Xian-gan HAN, Zheng-lei WANG, Yuan-yuan XU, Jin-feng MIAO, 2018. *Macleaya cordata* helps improve the growth-promoting effect of chlortetracycline on broiler chickens. *Journal of Zhejiang University-Science B* (Biomedicine & Biotechnology), 19(10):776-784. https://doi.org/10.1631/jzus.B1700435

## Macleaya cordata helps improve the growth-promoting effect of chlortetracycline on broiler chickens

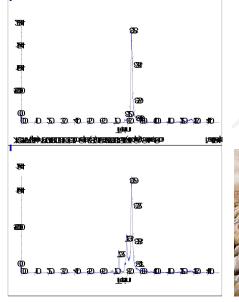
Key words: Chlortetracycline, *Macleaya cordata*, Broiler chicken, Growth promotion, Gut flora

## Research Summary

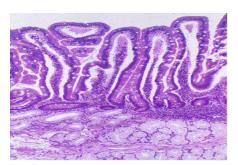
This article mainly focused on the growth-promoting effect of simultaneous use of chlortetracycline and macleaya cordata on broiler chickens, and summarized the roles they played in the following aspects:

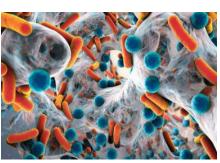


- CTC residue at blood and tissues
- Intestinal injury
- Gut microorganism



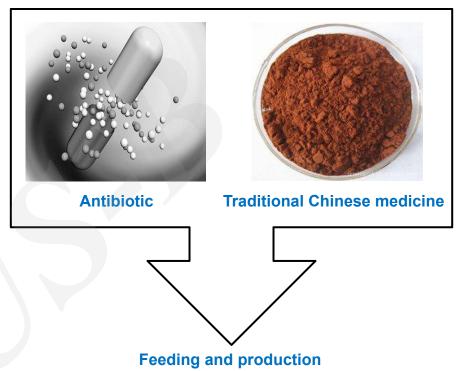


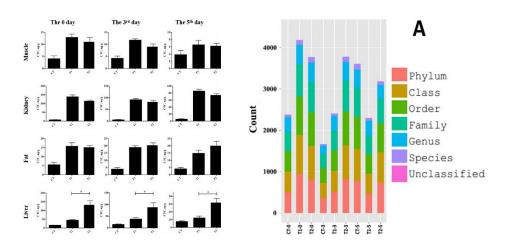




## Innovation points

- Exploration of broiler's growth performance indexes (survival rate, feed to gain weight, daily gain).
- Analysis of CTC residue in bleed or tissue by HPLC or HPLC-MS/MS.
- Emphasis of duodenal flora's function to identify the roles played in the growth-promoting effect.





## Innovation points

A series of results were generated to summarize that macleaya cordata help improve the growth-promoting effect of chlortetracycline on broiler chickens.

- Table 1 | Growth performance Indexes of broiler chickens.
- Table 2 | Alpha diversity analysis.
- Figure 1 | Chlortetracycline determination of plasma samples.
- Figure 2 | Chlortetracycline determination of tissue samples.
- Figure 3 | Small intestine pathological slices.
- Figure 4 | Gut flora sequencing.