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Universiteit Leiden



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STELLINGEN

Behorende bij het proefschrift

Cannabinoids and Zebrafish

1. Plant cell cultures hold a great promise for large scale production of highly polar derivatives of Δ^9 -THC (This thesis)
2. Our limited experience with synthetic chemistry cannot match the work of millions of years of plant and bacterial evolution when it comes to produce large quantities and varieties of polar derivatives of Δ^9 -THC (This thesis).
3. Zebrafish embryos are a good model to study the mammalian behavioral response to cannabinoids (This thesis).
4. NMR based metabolomics provides a system wide view on the metabolic effects of toxins in zebrafish embryos (This thesis).
5. Behavioral assays in zebrafish embryos not only offer high throughput screening of psychostimulants but also an opportunity to get deeper insights into drug activity.
6. Cannabinoids alter the levels of neurochemicals in zebrafish embryos.
7. What zebrafish embryos lack in evolutionary proximity to human, they make up in ease, throughput and transparency.

8. For *in vivo* toxicology studies, it is important to evaluate the effects of carrier solvents.
9. High lipophilicity of cannabinoid receptor agonists and antagonists requires the use of organic solvents in pharmacological evaluation. This inspired the hunt for methods to obtain more hydrophilic derivatives of these agonists and antagonists (Pertwee et al., 2000).
10. Taxing of legal marijuana sales is better than spending millions of dollars on executing prohibition, prosecution and false propaganda.
11. Lack of communication leaves room for assumptions.

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