



Tox21 – Toxicity Testing in the 21st Century

The Issue

Tox21 is a multi-agency collaboration¹ with the objective to research, develop, validate and translate chemical testing methods to characterize toxicity pathways. Tox21 is the Environmental Protection Agency's (EPA) long-range vision for the future of toxicity testing, which includes shifting from *in vivo* animal testing to *in vitro* testing. The focus of the new method development will be on *in vitro* testing and the development of models that can be used more effectively to predict how chemicals will impact biological response. Additionally, new tools to identify chemical-induced biological activity mechanisms are also under study. In 2077, the National Research Council released the Tox21 strategic plan, "Toxicity Testing in the 21st Century: A Vision and a Strategy."

CropLife America's (CLA) Outlook

1. CLA supports many of the principles and goals of Tox21.
2. The current reliance on animal testing for toxicological assessments should be reduced and optimized. As the Tox21 program moves forward, it will become clear if the new methods can be used directly by agencies for regulatory determinations.

Talking Points

- Tox21 is a collaborative effort between three federal agencies¹ to research new approaches and methods to evaluate chemicals based on laboratory or modeling approaches.
- The goal of the Tox21 program is to develop more efficient and less time-consuming approaches to predict how chemicals may impact human health and the environment.
- Tox21's focus is to develop new approaches to toxicity testing that would rely less on animal studies and more on *in vitro* methods to evaluate the effects that chemicals can have on biological processes.

¹ Tox21 Agency participation: U.S. Environmental Protection Agency, U.S. Department of Health and Human Services, and U.S. Federal Food and Drug Administration.