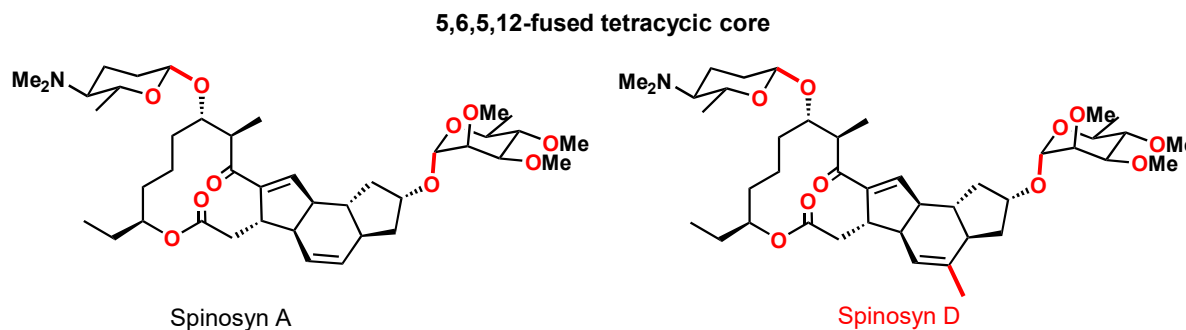


**Spinosad (Natroba):**

- Approved by the FDA in 2011
- Light orange coloured viscous suspension (topical use)
- 9 mg Spinosad / g
- 5 : 1 mixture of Spinosyn A and Spinosyn D
- Used for treatment of human head lice
- Causes neuronal excitation in insects
- Targets nicotinic acetylcholine receptors
- Lice become paralyzed and die
- Also used as a natural insecticide
- Made biosynthetically by fermenting of a soil bacterium *Saccharopolyspora spinosa*
- Low mammalian toxicity, excellent environmental profile
- Cross-resistance has been observed, next generation is needed



[https://www.accessdata.fda.gov/drugsatfda\\_docs/label/2011/0224081bl.pdf](https://www.accessdata.fda.gov/drugsatfda_docs/label/2011/0224081bl.pdf)

