

## **Diversity of Responses to Selenite Among *Agrobacterium* and Other Soil Bacteria**

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### Abstract:

Recently, we have gone back to some old semi-selective media as part of biovar typing for various *Agrobacterium* projects (2-4). We noticed that older colonies of some strains acquired an orange pigmentation on Schroth and New/Kerr media, and one of the only common components is the antimicrobial sodium selenite that inhibits the growth of most Gram-negative bacteria at submillimolar concentrations. We will present evidence that this orange pigmentation is actually the reduction of selenite to the amorphous form of elemental selenium, one potential way to detoxify the oxidizing agent. Given that many other *Agrobacterium* strains grow on these same media without the pigmentation change suggests multiple detoxification and/or reduction pathways, consistent with what is known in the literature (5-8). We will present further experiments we have done to begin to characterize these responses.

### References:

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