

Integrated Plant Protection Center Katie Murray, Faculty Research Assistant

2040 Cordley Hall, Corvallis, Oregon 97331-2915
Tel: 541-231-1983 | Fax: 541-737-3080
katie.murray@oregonstate.edu
http://ipmnet.org/

June 27, 2016

Environmental Protection Agency 1200 Pennsylvania Ave. NW Washington DC 20460-0001

Re: EPA-HQ-OPP-2012-0161, aldicarb registration review

The following comments are submitted regarding the registration review of the active ingredient aldicarb. These comments are being submitted on behalf of the Western IPM Center, and provide input from Pacific Northwest commodities.

The main Pacific Northwest industry that perceives a benefit from a renewed registration of aldicarb is the sugar beet industry of Oregon, Washington, and Idaho. This industry covers roughly 180,000 acres across the three states, with the majority of production centered in Idaho.

A major pest problem in sugar beet production is nematodes, primarily cyst nematodes, but also root knot nematodes are present. Approximately 60,000 acres are thought to be impacted by nematode presence. Aldicarb was previously used extensively for nematode control, and without it, growers have faced increased pressure from nematode damage. Aldicarb also offers control for other soil-dwelling insects that challenge sugar beet growers, mainly root maggot. The use of aldicarb to control nematodes has also been shown to replace at least one early season insecticide spray.

In the event of frost or wind damage, which is not uncommon, sugar beet growers have to replant their fields. A 20-50% replanting rate was cited as common for growers, and in some years, such as 2013, the rate was reported to have been as high as 80%. Because of a generally unstable sugar beet seed supply, growers often have to re-plant with whatever varieties are available. While both nematodetolerant and nematode-resistant varieties have been developed in sugar beets, these varieties are considered much lower yielding than the regular varieties (the tolerant plants are considered 5 to 10% lower yield, and the resistant plants are considered 30-40% lower yield). Further, while asymptomatic of nematode damage, these varieties still allow nematode reproduction on the plant roots. Thus, they do not reduce the presence of nematodes in the soil. The lower yield of these varieties, combined with the the likelihood of replanting, leads to these varieties being less used by growers, as there is concern that re-planting a non-tolerant or non-resistant variety into a field that has had a resistant variety runs the risk of planting into a nematode infested field that previously showed no symptoms.



Integrated Plant Protection Center Katie Murray, Faculty Research Assistant

2040 Cordley Hall, Corvallis, Oregon 97331-2915
Tel: 541-231-1983 | Fax: 541-737-3080
katie.murray@oregonstate.edu
http://ipmnet.org/

Growers currently have the use of Telone 2 (1,3-dichloropropene), a soil sterilant, but it is not considered as effective for nematode control as aldicarb. For controlling root maggots, Counter (terbufos) and Lorsban (chlorpyrifos) are considered the most effective products, but are still not as efficacious as aldicarb. As an important trade-off, aldicarb use would decrease the number of applications needed of either terbufos or chlorpyrifos. Because growers consider aldicarb to be the most efficacious product, the argument is that overall, inclusion of aldicarb in the marketplace could reduce the overall risk posed by current products available for limiting impacts of soil-dwelling pests.

Previous uses of aldicarb were held to stringent restrictions to mitigate risks, and with proper risk mitigation and education, sugar beet growers feel that safe and effective use of this product is possible and would be of benefit to their industry. However, this product is also acknowledged as highly toxic and extremely high risk to human and environmental health, and more ideally, effective alternative products and integrated practices should be developed for limiting the impacts of soil dwelling pests in order to reduce the need for this product in the longer term, especially as a prophylactic control measure.

Respectfully,

Katie Murray

Research Assistant, Extension IPM Integrated Plant Protection Center Oregon State University 541-231-1983 katie.murray@oregonstate.edu