

**Formal Recommendation by the
National Organic Standards Board (NOSB)
to the National Organic Program (NOP)**

Date: April 29, 2011

Subject: Sunset Ethylene gas

Chair: Tracy Miedema

The NOSB hereby recommends to the NOP the following:

Rulemaking Action X
Guidance Statement
Other

Statement of the Recommendation (Including Recount of Vote):

Relist Ethylene Gas: §205.601 Synthetic substances allowed for use in organic crop production.

(k) As plant growth regulator for pineapple flower induction

The Crops Committee motion to re-list Ethylene gas as a plant growth regulator for use with pineapples to induce flowering passed by a vote of 10 yes, 4 no.

Rationale Supporting Recommendation (including consistency with OFPA and NOP):

The Crops Committee (CC) requested and received a new Supplemental Information Report (January 25, 2011) on the use of Ethylene gas as a plant growth regulator, for the induction of pineapple flowering. Reference was made to the current scales of production in the US (which are in Hawaii and California) which do not amount to a large ratio of global production.

The CC found the report to be sufficient, while seeking information regarding large-scale pineapple operations outside of US borders (specific reference was made to Eco-LOGICA in Costa Rica for more information). The scale of operation and the impacts on others was discussed in order to ensure that varied sizes operations were referenced.

Alternatives were mentioned, including African cases with individuals carrying applicators (ensuring that small-scale operators could use products thus applied) as well as regarding research in Taiwan which showed that cold water applied three to four times at the correct time and right time intervals (24 hours) yielded production results similar to both Ethylene gas and calcium carbide options, though slightly (3-4 weeks) delayed. In addition to operation size and location concerns, the CC discussed that the subject of un-natural pineapple

flower induction, facilitated using synthetic-sourced (petroleum) Ethylene gas, is inconsistent in multiple ways with overall organic standards.

Public comment has come regarding production primarily in Costa Rica, however the export from a particular country, having created an export market based upon rules created recently on definition of organic pineapples in the US, does not mean that adequate information worldwide has been compiled.

Furthermore, farmers are not the ones doing the work on all Costa Rican areas of production, which includes notable amounts of hired and non-Costa Rican labor in production. If they are farmers, they function as contract-farmers and only are producing organic pineapples under the control of a broader market demand controlled by a large exporting company, and not by local or regional market demand which would allow for the farmer to function independently.

Small-scale independent farm production of organic pineapples in Hawaii direct-market all production with no need for consistent ripening due to consumer desire to have pineapples as commonly as possible.

Large scale Hawaii production of organic pineapples seeks to be able to harvest and ship product for export in volume.

Organic standards cannot be achieved exclusively based upon the needs of large- scale operations, but rather must balance overall production with other impacts. Do we all want pineapples year-round regardless of how to get them, to compete with chemical approaches, or do we need to also look at the environmental and health and overall costs, and balance with the benefits?

Continued use of a synthetic, petroleum-derived plant regulator for the purposes of achieving organic production outside of natural cycles is not required for production, and is not in conjunction with foundational organic principles. Alternatives must be considered, or seasonal balance of availability must be included in organic marketing approaches.

Based upon the information and experience available, the CC recommended against the continued listing of Ethylene gas (CC vote was 5 opposed to re-list with 2 absent members). Based on public input and the lack of conclusive alternative functionality and availability for pineapple flower induction, the NOSB voted in favor of re-listing.

NOSB Committee Vote:

Moved: John Foster	Second: Tina Ellor			
Yes: 10	No: 4	Abstain: 0	Absent: 0	Recusal: 0

**National Organic Standards Board
Crops Committee
2012 Sunset Proposed Recommendation
Ethylene Gas**

April 29, 2011

List: §205.601 Synthetic substances allowed for use in organic crop production.

(k) As plant growth regulators. Ethylene gas—for regulation of pineapple flowering.

Committee Summary

The Crops Committee (CC) made a recommendation on this material on March 2, 2011. Prior to that they had requested and received a new Supplemental Information Report on the use of Ethylene gas as a plant growth regulator, for the induction of pineapple flowering. Reference was made to the current scales of production in the US (which are in Hawaii and California) and do not amount to a large ratio of global production. The CC found the report to be sufficient, while seeking information regarding large-scale pineapple operations outside of US borders (specific reference was made to Eco-LOGICA in Costa Rica for more information). The scale of operation and the impacts on others was discussed in order to ensure that varied sizes operations were referenced. Alternatives and concerns with organic principle compatibility were considered with information available at that time.

On April 28, 2011, the CC met to consider new public comment and determined that the utility of alternatives may not be sufficient for the needs of the industry as a whole and reconsidered their prior recommendation.

Committee Recommendations

The motion was to continue the listing of ethylene gas as a plant growth regulator, for the induction of pineapple flowering. The CC recommends the continued listing of ethylene gas, without change to the annotation.

Committee Vote

Motion: To relist Ethylene gas—for regulation of pineapple flowering, on § 205.601(k)

Motion: Tina Ellor Second: Nick Maravell

Yes: 4 No: 3 Absent: 0 Abstain: 0 Recuse: 0