

# PROPOSAL:

## INDOLE-3-BUTYRIC ACID (IBA)

### SUMMARY

**Reject** the proposal to add Indole-3-Butyric Acid (IBA) to the National List (7 CFR §205.601) for the purpose of plant propagation via dipping.

#### *Rationale*

- IBA is not essential in organic production.
- Synthetic growth hormones are not consistent with organic production.
- Application methods require clarification.

### BACKGROUND

Indole-3-Butyric Acid (IBA) is a plant hormone, specifically an auxin, that is commonly used in conventional agriculture. When propagating plants from cuttings, IBA is applied directly to plants to encourage root formation. This type of use, when the cut stem is dipped into an IBA solution, is called a “point application.” Another type of use, called “area application,” involves applying a broadcast spray over the field.

IBA was previously petitioned for both point and area applications. At the Fall 2011 NOSB meeting, the NOSB voted against the proposal (12 No, 2 Yes). The petition was then resubmitted on August 8, 2012, for point applications only, on plants propagated from cuttings in enclosed structures. The Crops Subcommittee again voted to deny the petition (5 No, 3 Yes).

### CONCERNS WITH IBA

#### *IBA is not essential for organic production*

The petition<sup>41</sup> mentions several crops where IBA may facilitate plant propagation, including herbaceous perennials, woody perennials and annual vegetables. In each case, IBA is not essential for organic production, because there are effective alternative practices available.

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<sup>41</sup> Hortus USA Corp. 2012. Petition of substance for inclusion on the National List of Substances allowed in Organic Production and Handling, Indole-3-butyric acid, IBA

Some crops, such as mint and strawberries, readily propagate themselves through natural production of stolons, or runners. Woody perennial crops, such as rosemary, can be propagated by stem cuttings or root division, even without the use of hormones.

The petition states that many seedless crop plants are not available to the organic market; examples include seedless tomato, cucumber, melon and squash. Although a few varieties of those crops may not be available to organic growers, they represent only a very small portion of the available varieties. Seedless varieties are not essential, as there are many alternatives.

If a certain perennial crop requires IBA for propagation, there is already a mechanism to allow its use in Section 205.204 (a)(4). If IBA is used on perennial planting stock, that stock may be sold as organic after it is managed organically for at least one year. This is a reasonable approach, especially when considering that seeds treated with prohibited materials are not allowed at all in organic production.

### ***Synthetic growth hormones are not consistent with organic production***

The Organic Foods Production Act (OFPA), Section 6517 (c)(1)(B)(i) allows substances to be added to the National List if (among other requirements):  
(B) the substance -

- (i) is used in production and contains an active synthetic ingredient in the following categories: copper and sulfur compounds; toxins derived from bacteria; pheromones, soaps, horticultural oils, fish emulsions, treated seed, vitamins and minerals; livestock parasiticides and medicines and production aids including netting, tree wraps and seals, insect traps, sticky barriers, row covers, and equipment cleansers;

There is no category to add plant hormones to the National List. Although the members of the Crops Subcommittee suggested that IBA could be called a “production aid,” it does not belong in that category. All the other production aids are materials that are outside the plant, and they can easily be removed from the environment (such as tree wrap). Plant hormones are effective only if they are taken up by the vascular system of the plant. In this respect they more closely resemble synthetic fertilizers, or systemic insecticides, rather than production aids.

### ***Application methods require clarification***

The wording in the petition differs slightly from the wording in the proposal, which could result in confusion.

The petition states “*for purposes of plant propagation from cuttings.*”  
The proposal states “*for the purpose of plant propagation via dipping.*”

The proposal mentions dipping of cuttings into a solution, which is clearly a point application, and would use only a small amount of IBA. The language of the petition, on the other hand, does not mention dipping. The petition does not preclude putting the cuttings in the ground and using an area application over the ground. IBA should not be broadcast over the soil. Use of area applications should be prohibited, even in enclosed structures, such as greenhouses and hoop-houses. The wording “enclosed structures” is irrelevant—the same organic principles must be followed whether the substance is used in the field or an enclosed structure. This is of particular concern because many of the new “enclosed structures” are temporary hoop-houses used to grow crops in the soil. The hoop-houses are then taken down and the plants grow outside. Use of IBA on plants in the ground should be prohibited, even if they are cuttings planted in an enclosed structure.

## **CONCLUSION**

Cornucopia agrees with the majority position of the Crops Subcommittee. IBA is a synthetic material that should not be added to the National List.