



# IPM in the Whole Foods Market Responsibly Grown Rating System

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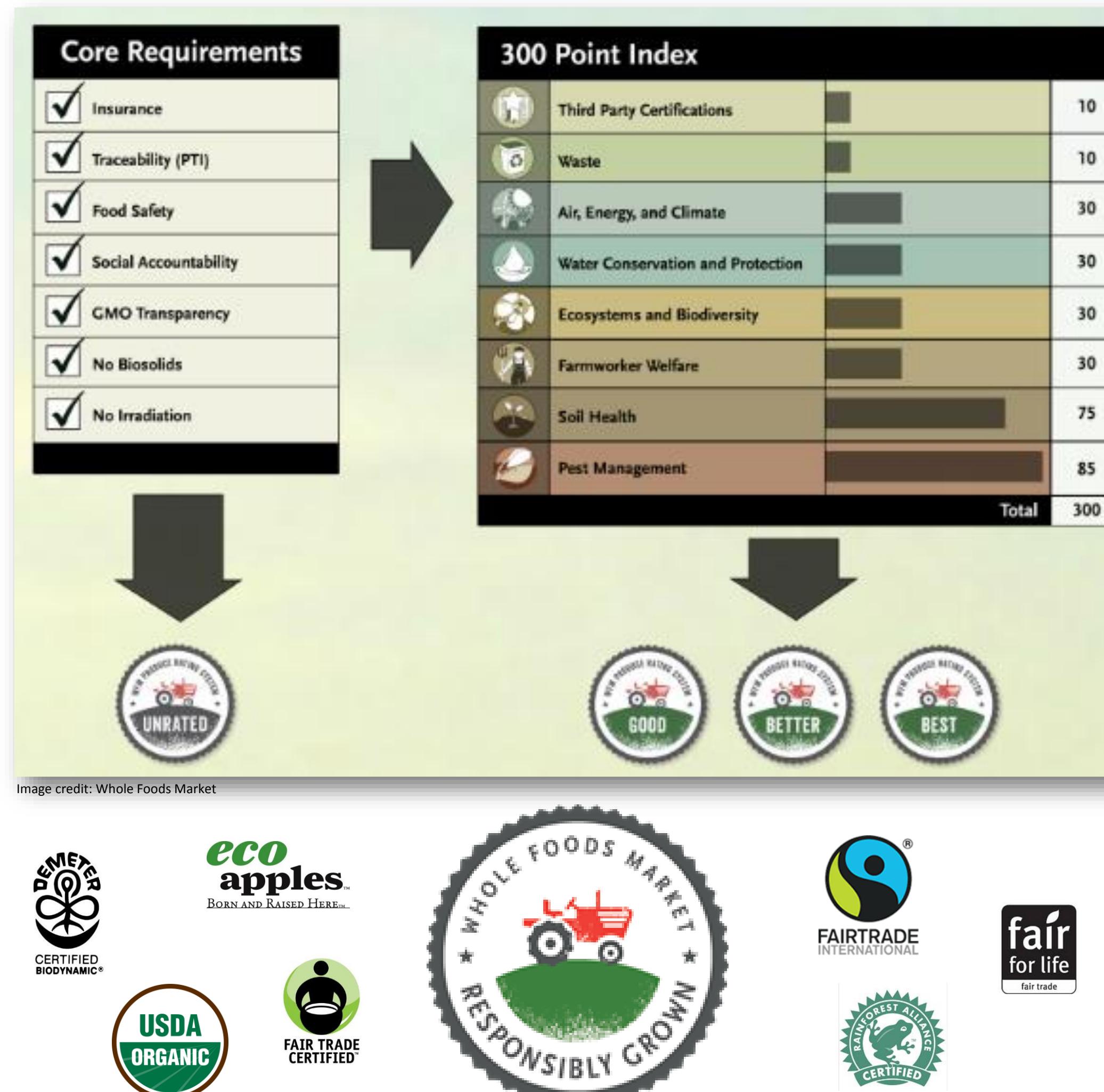
## Purpose

- Reward growers for implementing science-based sustainable agricultural practices that reduce impacts on the soil, water, air, climate, workers and surrounding ecosystems.
- Provide Whole Foods Market customers with an at-a-glance rating that considers key sustainability criteria.
- Reduce the risks associated with pesticide use by prohibiting the use of the most harmful pesticides and providing tools to measure and reduce risks.
- Encourage improvement in the supply chain over time.



Photo credit: Whole Foods Market

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## How does it work?

- Tiered rating system for fresh produce and flowers launched in October 2014.
- Developed in partnership with IPM Institute, scientists, sustainable agriculture experts and stakeholders.
- Provides credit for existing certifications including Demeter, Eco Apples, Rainforest Alliance, USDA Organic and Fair Trade, and for use of existing tools such as Stewardship Index for Specialty Crops, ipmprime.com and Cool Farm Tool.
- All suppliers meet minimum requirements including GMO transparency, food safety, traceability, no biosolids or irradiation.
- Suppliers answer questions about farming practices. IPM Institute evaluates responses. Based on confirmed practices, suppliers earn ratings of "Unrated", "Good," "Better" or "Best."
- Key sustainability topics include soil health, pesticide use, ecosystems and biodiversity protection, pollinator health, water and energy conservation, farm workers, waste and air quality and climate impacts.
- Three-tier verification system including inspections of all supplier applications, and desk and on-site audits for a portion of the supply chain each year.

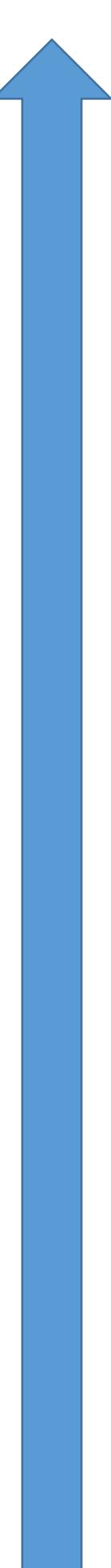
## Focus on IPM

- Protect pollinators from pesticide exposure. Do not apply selected neonicotinoids.
  - Identify pesticides and pests at high risk of developing resistance, implement measures to mitigate.
- Take steps to enhance soil health, including cover crops and crop rotation, to promote healthy crops.
- Implement measures to reduce pest damage without the use of pesticides.
  - Provide habitat for native species including beneficial insects.
- Use ipmprime.com decision support tool to identify and reduce risks associated with pesticide applications.
  - Measure and reduce pesticide risks.
- Identify key features of pests including knowledge of pest lifecycles.
  - Record all nutrient and pesticide applications.
- Promote good crop health and reduce runoff by matching nutrient applications to crop need.
  - Calibrate nutrient and pesticide application equipment.
- International growers only use pesticides approved for use by the US EPA.
  - Implement drift mitigation plan.
  - Apply pesticides based on inspection and monitoring.
  - Prohibit certain high-risk pesticides.

Best

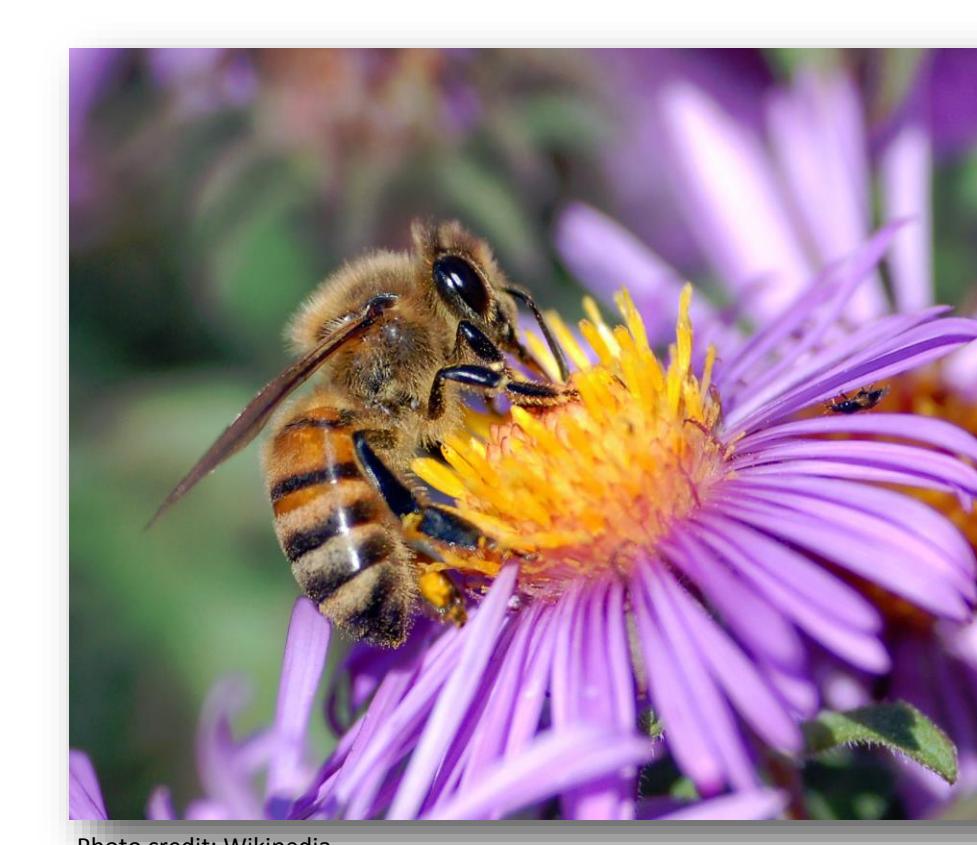
Better

Good



To achieve a "Good" rating suppliers must implement basic IPM practices. To achieve higher ratings of "Better" and "Best" advanced IPM practices must be implemented.

## Prohibited and Restricted Pesticide Policy



- All suppliers must follow the WFM Prohibited and Restricted Pesticide Policy to be eligible for a rating. The policy primarily targets active ingredients that pose the highest dietary risk to consumers.
- Dietary risk was established by assessing the neurotoxicity of pesticide products and levels of consumer exposure through pesticide residues found on fresh produce.
- Dr. Charles Benbrook of Washington State University created the dietary risk index (DRI) which represents the probability of consumer exposure to harmful levels of pesticide residues from fresh produce. Active ingredients with moderate to high DRI values and registration for use on food crops are included in categories 1A, 1B and 2A of the prohibited pesticide policy.
- Category 2A accounts for certain circumstances that lead vendors to need the application of a prohibited or restricted product in order to produce a marketable crop. Category 2C accounts for circumstances when products grown outside of the US are treated with a pesticide that may not be registered with US EPA. Suppliers can apply for pesticide exceptions under either category 2A or 2C. IPM Institute reviews exception requests, which includes investigation of alternative products, analysis of the environmental and dietary risks and identification of risk mitigation measures.
- Category 2B covers systemic active ingredients that are highly toxic to pollinators. Active ingredients that are highly toxic to pollinators have a contact LD50 of less than two µg a.i. per bee, as defined by the US EPA. An LD50 value represents the dosage that is lethal to half of the exposed population.

<b>CATEGORY 1A: PROHIBITED</b>
No food uses registered by US EPA but still in use in agriculture outside of US
<b>Prohibited without exception regardless of product origin for "good" rating</b>
<b>CATEGORY 1B: PROHIBITED</b>
Registered for food use by US EPA
<b>Prohibited without exception for "good" rating</b>
<b>CATEGORY 2A: RESTRICTED</b>
Prohibited unless a specific exception is posted
<b>CATEGORY 2B: RESTRICTED</b>
Prohibited for "best" rating
<b>CATEGORY 2C: RESTRICTED</b>
Prohibited unless a specific exception is posted