Ecology Action Informational Statement for GROW BIOINTENSIVE® and CULTIVE BIOINTENSIVAMENTE^(MR) Closed-Loop Sustainable Mini-Farming Method Formal Practitioners and Certified Teachers on Quality Assurance and Data Reporting Requirements

February 7, 2020

Ecology Action is excited that the GROW BIOINTENSIVE® / CULTIVE BIOINTENSIVAMENTE^(MR) method ("GB/CB") is being successfully used in 153 countries globally in virtually all climates and soils where food is grown, and is making a huge positive difference in the lives people growing food, reducing resource use, sequestering carbon, and improving soil fertility in their home gardens and their communities. Each GB/CB method practitioner, trainer, and certified teacher in the Global GROW BIOINTENSIVE Family Team is making a World of Difference each time they show someone how to use the method correctly and sustainably. As the method's use and influence spreads, it is even more important that GB/CB quality assurance is maintained. We thank each GB/CB method gardener, farmer, researcher, trainer, and certified teacher for being a part of this important long-term global effort.

The following is intended to address the fact that in the course of teaching the GB/CB method, some alterations are being integrated into the protocols that are not in keeping with the sustainability standards required of Ecology Action Certified GB Teachers. People are encouraged to experiment and innovate within their own gardens, but those novel approaches must be confined to private practice, and not integrated into official GROW BIOINTENSIVE/CULTIVE BIOINTENSIVAMENTE method teaching or demonstration areas.

Ecology Action is the creator, formative organization and legal representative of GROW BIOINTENSIVE® and CULTIVE BIOINTENSIVAMENTE^(MR) Closed-Loop Sustainable Mini-Farming Method. Ecology Action's purpose and goal are to teach the method in a standardized format, and insure that the quality assurance for the method is maintained by all formal practitioners of the method and those performing certified teaching of others to use the method, and particularly certified teachers at all levels, using tools, techniques, information and models provided by Ecology Action or their designated representatives.

Quality Assurance in the methodology and practice of the GB/CB method can be found in *How to Grow More Vegetables (and Fruits, Nuts, Berries, Grains, and Other Crops) Than You Ever Thought Possible on Less Land with Less Water Than You Can Imagine* (9th edition, 2017) ("HTGMV") (growbiointensive.org/publications_main.html), also in Ecology *Action's Teacher Certification Booklet #30* (growbiointensive.org/TeacherCertDocs/Teacher%20Certification%20Booklet.pdf), and in the *Protocols* found at growbiointensive.org/grow_main.html?tab=6#TabbedPanels1

- All GB Practitioners: GB Sustainability Standards
- All GB Practitioners: Checklist How Sustainable is Your Garden?
- All GB Practitioners: Compost Application Guidelines
- All GB Practitioners: Quality Assurance and Sustainability Statement
- Intermediate/Advanced GB Practitioners: GB Compost Protocol
- Intermediate/Advanced GB Practitioners: Soil Test Station Protocol
- Intermediate/Advanced GB Practitioners: Closed-Loop Sustainability Protocol
- Intermediate/Advanced GB Practitioners: Soil Test Recommender Protocol

Quality assurance in temperate regions includes the 60:30:10 crop planting sustainability ratio (60% carbon and calorie crops: 30% high-calorie root crops: 10% vegetable and income crops) in HTGMV 9th edition, pages 39-40, and 41 marginal notes. For tropical regions, the ratio is 50:30:20, page 22 of Ecology Action *Booklet 31*, "Designing A GROW BIOINTENSIVE® Sustainable Mini-Farm" revised March 2013 (growbiointensive.org/ePubs). If you have questions regarding deviations from these standards, please contact Ecology Action at contact@growbiointensive.org or +1-707-459-0150. If you are a GB method Trainer, Farmer or Certified Teacher please be advised that you are not permitted to teach the GROW BIOINTENSIVE® / CULTIVE BIOINTENSIVAMENTE^(MR) method to others using ratios other than the two mentioned above, and you need to follow the guidelines indicated in **Quality Assurance**, above.

Currently, Comunidad y Sustentabilidad El Mezquite, A.C. (formerly ECOPOL – Juan Manuel Martinez, President; in a period of transition in the academic world, the name is ECOPOL-El Mezquite) is authorized to act as the GROW BIOINTENSIVE® /CULTIVE BIOINTENSIVAMENTE^(MR) method representative and certification provider for Basic, Intermediate, and Advanced-level GB/CB method teachers in Latin America, the Caribbean and Europe. This authorization for certification providers is at the sole discretion of Ecology Action and can be revoked at any time if the certifier is not maintaining quality control in the method to the satisfaction of Ecology Action and its Board of Directors. Ecology Action is the sole certification provider for master-level GB/CB method teachers. Ecology Action is the also the certification provider for those parts of the world not otherwise specified for above.

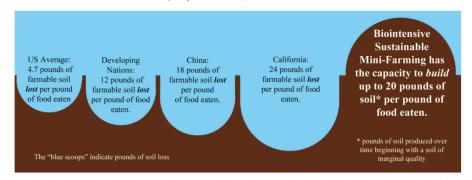
In addition to maintaining adequate quality control over the practice of the GB/CB method, Mini-Ag Centers (GB/CB Demonstration Gardens run by Certified GB teachers) are required to provide data from a specified number of beds as indicated in *Booklet #30* (as appropriate for the GB/CB method teacher's certification level) to provide evidence that the method is being practiced correctly, and to determine future best practices for the method in different regions/climates/soil types/cultural considerations. This data must be provided in a timely manner to either Ecology Action directly, or to Ecology Action via CSEM/ECOPOL.

Individual people, projects and/or programs receiving funding from Ecology Action for GB/CB method demonstration and training activities are subject to withdrawal of the funding and/or possible repayment of funds received, if they do not adhere to sustainability guidelines (particularly, if they deliberately omit, exclude, alter, or circumvent those guidelines in the course of their work) including the 60:30:10 or 50:30:20 crop ratios and the annual submission of data in the approved format.

To be clear, Ecology Action deeply values and respects the work the GB/CB method teachers and trainers in the field are performing, and has no wish to exercise unreasonable restrictions on their activities or discourage innovation on their *private* projects, even if they range far away from GB/CB method standards. However, the first priority for any form of public presentation of the GB/CB method is, and must be, to ensure that the integrity of the closed-loop sustainability of the method, which was carefully and meticulously developed over the course of 48 years of applied research, is maintained at all times. All GB/CB method practitioners who train members of the public to use the GB/CB method must understand and agree to this standard. Those who do not wish to adhere to this standard are free to teach others to use their preferred methods, but they must not present those methods as being in any way associated with or approved by Ecology Action or the GROW BIOINTENSIVE® / CULTIVE BIOINTENSIVAMENTE^(MR) (GB/CB) Closed-Loop Sustainable Mini-Farming Method, and they must not present those alternate methods while in the pay of Ecology Action, either directly or via funding made by Ecology Action to its partner organizations.

Thanks for working together to encourage sustainable, closed-loop food- and soil growing with a fraction of the resources while reducing climate change in the world with the GROW BIOINTENSIVE® / CULTIVE BIOINTENSIVAMENTE^(MR) method! Each of our local initiatives add up to a greater whole.

What is GROW BIOINTENSIVE?



Ecology Action has dedicated almost 50 years of research to rediscovering the scientific principles that made millenniaold traditional farming systems like those of the Maya and the Ancient Chinese so sustainable and successful. These principles have guided us to the eight essential aspects that are the foundation of GROW BIOINTENSIVE Sustainable Mini-Farming System:

- Double-Dug, Raised Beds to create a healthy environment for roots and beneficial soil organisms
- Composting to provide healthy, inexpensive fertilizer that keeps the soil producing year after year
- Intensive Planting to maximize efficiency and productivity, and to conserve water
- Companion Planting to take advantage of the beneficial synergy between certain plants
- Carbon Farming growing fertilizer while growing food
- Calorie Farming growing the greatest number of calories per pound of food
- The Use of Open-Pollinated Seeds to encourage farmer independence and regional food security
- A Whole-System Farming Method using all aspects of the system to create a healthy, sustainable farm

This means that, using our GROW BIOINTENSIVE mini-farming techniques, small farmers can grow food using:

- 67% to 88% less water. So they still may grow food in a drought, like the one taking place in Kenya right now.
- 50% to 100% less purchased fertilizer. So they can still grow food even when they don't have much money.
- 99% less energy than conventional agriculture, while using a fraction of the resources. So they don't contribute to agricultural pollution. In fact, GROW BIOINTENSIVE helps sequester carbon in the soil, which helps reduce greenhouse gas levels in the atmosphere.

...and that GROW BIOINTENSIVE, when used as recommended by Ecology Action, can also help farmers:

- Produce up to 2 to 6 times more food per unit of land, as compared with conventional agriculture. This means
 more food security and less poverty, particularly for those who need it most: small farmers in developing countries.
- Build fertile soil sustainably, through carbon sequestration up to 60 times faster than nature. So farmers can continue to feed their families and communities into the future, without destroying their environment.
- Reduce the amount of land needed to grow equivalent amounts of food and compost materials by as much as 50% or more, as compared with conventional agriculture. This means protected ecosystems, more wild-land, safer wildlife, and a healthier, happier planet for us all.

48 Years. 153 Countries.

Millions of people educated.
Millions of garden beds created.
Billions of pounds of food and fertile soil grown.

...and we're just getting started.

Grow Hope. Grow Abundance. GROW BIOINTENSIVE!

Ecology Action • 5798 Ridgewood Road • Willits, CA • 95490 • 707.459.0150 • www.growbiointensive.org

4812-3086-3028\1

5