Minga House Foundation
Non-Profit Organization – Founded in 2014
NIT: 900867100-4
www.MingaHouse.org

What is MINGA?

"Minga entails a collaborative work system that dates back to the Incas. It refers to the commitment, contract or work agreement between two or more people. The word minga also stands for meeting or reunion."

VOLUNTEER & INTERNSHIP OPPORTUNITY

Coffee Permaculture

Learning Objectives:

BioProteccion is one of the leading companies in Colombia that produce biological products for getting rid of or preventing insects on cattle or crops. Managing pests with natural methods is BioProteccion's vital contribution to Colombia's growing permaculture movement in efforts to not only produce healthier organic coffee products for the consumer but also to help in providing a healthier and safer work environment for the coffee farm worker.

Permaculture is a global grassroots movement that builds healthy environments, regenerates the land and empowers communities. It is a sustainable design approach that mimics patterns in nature to create regenerative edible ecosystems. It applies natural design principles to create resilient systems – providing food, water, shelter, and energy needs while building ecology, community, and economy.

Permaculture is an interdisciplinary framework which uses both modern and traditional technologies and focuses on the synergistic relationships between different approaches to find creative solutions through collaboration rather than competition. In contrast to monoculture farming, permaculturists cultivate perennial-focused multi-layered polycultures of crops that provide ecological services to each other to create biodiverse, climate-resilient and marketable food forests.

During In this rotation you will learn by doing; have experience how Colombian farmers work on the farms by participating in the daily chores such as caring for the crops, animals, and grounds. In doing so, you can learn a variety of techniques employed including organic farming, Permaculture, and Biodynamics. In addition to learning about organic farming, you can also learn about the local ecology and culture while getting to meet fun and interesting people. Principle regional crops include Coffee, Cacao, Bananas, Avocado, and citrus. But you will be exposed to many other unique Colombian fruits and vegetables. Colombia is home to 10% of the world's biodiversity.

Participant Requirements:

Educational Background:

Undergraduate, graduate, or professionals in any of the following fields: Agriculture, Eco-Tourism, Agronomy.

Spanish Language Skills:

(None) 1 2 3 4 **5** **6** **7** 8 9 10 (Fluent) A medium level of Spanish is desired, but not required.

Potential projects and day-to-day duties:

- Work and assist farmers as directed
- Tasked to compare/contrast Colombian practices vs. U.S. practices then make presentation
- Support in the review of current internal operations processes & procedures for improvement
- Support in the daily tasks and other duties assigned by supervisor
- Play the role of a 'day in the life' of a Colombian farm worker

Service Term:

- **Plan Prep Time:** 15 days min required before arrival date
- **Service Term:** 14 days min required – 32 hrs/wk required
- **Work Schedule:** TBD (may be supplemented by course enrollment for UCM credit)
- **Service Window:** January to December

Special Skills Desired:

- Interest in eco-sustainable farms and agriculture
- Strong communication skills
- Responsible & Mature
- Safety Conscious
- Great attitude
- Proactive

BioProteccion Introduction video link: https://youtu.be/xl5n8BTL46s

Related Article:

Biological control using invertebrates and microorganisms: plenty of new opportunities

van Lenteren, J.C., Bolckmans, K., Köhl, J. et al. BioControl (2017). doi:10.1007/s10526-017-9801-4
https://link.springer.com/article/10.1007%2Fs10526-017-9801-4

Biological control using invertebrates and microorganisms: plenty of new opportunities

- Authors
- Authors and affiliations
- Joop C. van Lenteren
- Karel Bolckmans
- Jürgen Köhl
- Willem J. Ravensberg
- Alberto Urbaneja

Article
First Online:
18 March 2017
DOI: 10.1007/s10526-017-9801-4
Cite this article as:
van Lenteren, J.C., Bolckmans, K., Köhl, J. et al. BioControl (2017). doi:10.1007/s10526-017-9801-4

Abstract

In augmentative biological control (ABC), invertebrate and microbial organisms are seasonally released in large numbers to reduce pests. Today it is applied on more than 30 million ha worldwide. Europe is the largest commercial market for invertebrate biological control agents, while North America has the largest sales of microbials. A strong growth in the use of ABC, particularly of microbial agents, is taking place in Latin America, followed by Asia. The current popularity of ABC is due to (1) its inherent positive characteristics (healthier for farm workers and persons living in farming communities, no harvesting interval or waiting period after release of agents, sustainable as there is no development of resistance against arthropod natural enemies, no phytotoxic damage to plants, better yields and a healthier product, reduced pesticide residues [well below the legal Maximum Residue Levels (MRLs)], (2) professionalism of the biological control industry (inexpensive large-scale mass production, proper quality control, efficient packaging, distribution and release methods, and availability of many (>440 species) control agents for numerous pests), (3) a number of recent successes showing how biological control can save agricultural production when pesticides fail or are not available, (4) several non-governmental organizations (NGOs), consumers, and retailers demanding pesticide residues far below the legal MRLs, and (5) policy developments in several regions of the world aimed at reduction and replacement of synthetic pesticides by more sustainable

methods of pest management. We are convinced, however, that ABC can be applied on a much larger area than it is today. We plead in the short term for a pragmatic form of agriculture that is adaptable, non-dogmatic and combines the sustainability gain from all types of agriculture and pest management methods. We then propose to move to “conscious agriculture”, which involves the participation of all stakeholders in the production and consumer chain and respects the environment and resource availability for future generations. Were “conscious agriculture” to be considered a serious alternative to conventional farming, ABC would face an even brighter future.

Keywords

Augmentative biological control Pest control policies Benefits of biological control Market developments in biological control Worldwide use of biological control Integrated pest management Conscious agriculture

Handling Editor: Russell Messing.

Electronic supplementary material

The online version of this article (doi:10.1007/s10526-017-9801-4) contains supplementary material, which is available to authorized users.

Introduction

Politicians, policy makers, retailers, consumers, growers, and grower organizations are increasingly asking for and speaking about biological control. Hardly a day passes during which we, the authors of this paper, do not receive a question on how to control a certain pest, disease or weed, where to obtain biological control agents, and how to stimulate the use of this environmentally safe pest management method. The European Union (EU) has been advocating the use of biological control since 2009 in its Sustainable Use of Pesticides Directive (EC 2009). The President of China recently launched a “National research program on reduction in chemical pesticides and fertilizers in China” involving more than 340 million US$, indicating a need for the development and application of non-chemical control methods. Together, the authors of this paper have been working in the field of augmentative biological control (ABC) for more than 150 years. We noted a hesitant start to ABC in the 1970s, then a burst of activity took place over the next 25 years. During the first decade of the twenty-first century fewer new biological control agents came to the market, but during the second decade we again experienced a new phase with strong growth in both the development of new agents and a market for biological control (van Lenteren 2012; Tables 1, 2 and 3 in this paper).