

PRESS RELEASE: 08/24/2020
TO ALL MEDIA PERSONNEL: FOR IMMEDIATE RELEASE

Insect Technology Startup MUSCA launches Presale of new retail fertilizer product for home gardeners, in first-ever crowdfunding event

TOKYO—Aug 24, 2020—MUSCA Inc. (hereinafter “MUSCA”), launches its presale of a new retail fertilizer product for home gardeners at crowdfunding site *Makuake* today. The fertilizer is the retail debut of MUSCA’s wholesale organic fertilizer, that has been tried and tested by local agricultural producers practicing sustainable production of flavorful produce.



A better future in harmony with Earth, utilizing the energy of fly-larva

SDG, Sustainable and Ethical

Sustainability related vocabulary has infiltrated our lives, from national and regional government level to everyday products as mundane as supermarket bags and drinking straws. MUSCA is expanding from its wholesale organic fertilizer product line tried and tested by agriculture producers, and launching a new retail fertilizer product targeted to home gardeners, taking a concrete step closer to realizing a sustainable society.

▼ Sustainable Food Organic Fertilizer



MUSCA's organic fertilizer can help solve food and organic waste treatment issues, and significantly reduces greenhouse gas emissions in the process.

▼ Why one week? In just seven days MUSCA's fertilizer draws a better future for Earth
MUSCA Inc. developed a highly efficient recycling system that utilizes the energy of insects to convert biomass into fertilizer and feed in one week. "One Week" are exactly the two words that symbolize MUSCA's unique identity. The general method of making organic fertilizer is called composting, which typically takes months to years using microorganisms. With MUSCA's selectively bred house flies, this lengthy process is shortened to one week, while simultaneously producing alternative protein feed for livestock.

▼ Production of fertilizer with less greenhouse gas emissions

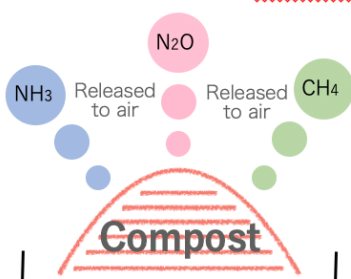
80 million tons annually, equating to roughly 61 Tokyo Dome Stadiums. This is the amount of livestock manure discharged in Japan every year. Domestic food loss is 6.4 million tons per year, which is less than 1/12 of the annual domestic livestock discharge.



Sustainable Food - Organic Fertilizer

Greenhouse gas emissions from the treatment of 80 million tons of livestock manure annually, is one of the factors contributing to global warming. Composting of livestock manure is mandatory by law, however methane gas and nitrous oxide generated during this bioconversion have a greenhouse effect that is 25 times and 300 times that of CO₂, respectively. The amount of carbon dioxide released is 11% and 22% of the total domestic emission, as revealed by a survey conducted by the Japan Center for Global Warming Prevention Activity (JCCCA).

Conventional Fertilier



NH₃ - Anmonia

- Cause of Odor
- Cause of Acidic Rain

N₂O – Nitrous Oxide

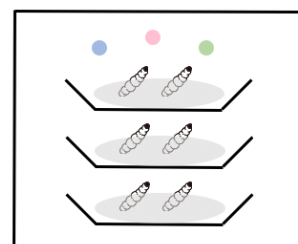
- Greenhouse effect 300 times stronger than CO₂
- Livestock-waste processing generates 22% of total domestic release

CH₄ - Methane

- Greenhouse effect 25 times stronger than CO₂
- Livestock-waste processing generates 11% of total domestic release

*Source: JCCCA

MUSCA Style



- Significantly reduces **greenhouse gas** emissions
- Contains **odor** with indoor treatment
- Can be processed without outside temperature influence
- **Conversion to fertilizer completed in one week**, as opposed to conventional composting length of more than several months

In comparison to the above described process, MUSCA's method can significantly reduce greenhouse gas emissions with an overwhelmingly speedy process of one week. Not only does MUSCA's method tackle food problems, the process itself is environmentally sustainable.

We believe in leveraging "nature's power of circulation" to solve the problems humankind and our planet Earth is experiencing, to leave a better world for future generations.

▼Description in accordance with Fertilizer Control Law in Japan



- 完熟させた有機肥料のため、ニオイはありません。
(卵、幼虫、成虫ともに完全に除去しており、残留していません。)
- 肥料三大要素含有量は窒素 (N)3.1%、リン酸 (P)8.3%、カリ (K)1.7%
- 病原菌に強い作物を育てることができます。(宮崎大学農学部調査)
- 既に、提携有機農家さまで米づくりなどにご利用いただいています。

サステナブルフード有機肥料

＜使い方＞

- 元肥として：プランターの場合、用土 10 リットルに対して 100～200g をよく混合してください。畑の場合 1 坪に対して 1kg を目安に、栽培する植物に合わせて使用ください。
- 追肥として：植物の成長に合わせて根元から離れたところに適量与え、軽く土と混合してください。

＜ご注意＞

- 本品は園芸肥料ですので、人やペットが誤って食べないようにご注意ください。

- 空袋は幼児や子供にとって窒息などの危険を伴うものです。幼児や子供の手の届かないところに保管や処理をしてください。

＜保存方法＞

- 開封後は直射日光を避け、なるべく湿気の少ない涼しいところに保管してください。
- 有機質肥料のため、湿気を帯びますとカビが発生することがありますが、品質には影響ありません。
- ご使用量をよく読みご使用ください。

肥料取締法に基づく表示	
肥料の名称：ムスカ有機肥料	主要な成分の含有量等：以下現物あたり
肥料の種類：動物の排泄物	窒素 (%) 3.1
届出をした都道府県：宮崎県	りん酸 (%) 8.3
表示者の氏名又は名称及び住所： 株式会社ムスカ宮崎支店 宮崎県児湯郡都農町大字11北 7650-1	加里 (%) 1.7
TEL: 050-5357-2816	炭素窒素比 (C/N) 9.6
正味重量：5kg	石灰 (%) 7.5
生産した年月：2020 年 月	苦土 (%) 1.8
	水分含有量 (%) 11.4
	原料：繁殖・肥育豚 豚糞

▼Message from MUSCA Inc. Co-CEO Ayano Ryugo

Many people have adjusted to a new lifestyle as Covid-19 affects communities across the world, creating the “new normal”. In our business as well, there are moments where progress is not as fast paced as we wish it to be, due to this situation. However, because of current conditions, I feel the importance more than ever before, to take on new challenges. As a new initiative at MUSCA, we are preselling MUSCA organic fertilizer as a retail gardening product through crowdfunding. As more and more people spend time at home, I would like to propose a sustainable “Okomori (Nesting-At-Home) Gardening” proposal from MUSCA. Our high-quality fertilizer is produced with the energy of insects. It is an honor and brings us great joy, to help our customers in growing delicious vegetables and herbs for their meals.



--About MUSCA Inc.--

“Highly Efficient Biomass Recycling in 1 Week” Insect technology firm, MUSCA, uses highly productive house-fly larvae to upcycle biomass into organic fertilizer and insect-protein feed in a one-week-cycle. With the circular economy concept at the heart of its business model, MUSCA is one of few pioneers of elite housefly-farming technology, rearing houseflies that have been selectively bred 1200 generations for almost 50 years. With more products on the horizon, MUSCA seeks to address the global challenges of pollution, protein deficit, and food crisis.

About MUSCA : <https://musca.info/en/> / Media Contact : pr@musca.info