IMMUNOSTIMULATORY GARDENING MATERIALS

Invention: Gardening and landscaping materials proven to enhance the natural development of the human immune system.
Indication: Immune mediated diseases such as type 1 diabetes, asthma and allergies.
Unmet need: ImmunoGarden materials bring biodiversity to the urban environment to improve health.
IP Status: Patent pending
Project phase: Proof-of-concept studies ongoing.

ImmunoGarden develops gardening and landscaping materials that are scientifically proven to modulate the human immune system, reduce the probability of immune mediated diseases as well as to help to maintain immune health. ImmunoGarden provides materials, such as soil, mineral soil and sod, which can be applied in a similar way as traditional gardening and landscaping materials. The solution is sustainable as it utilizes forestry side streams and consists of natural ingredients.

Dr. Aki Sinkkonen, Principal Investigator
University of Helsinki, Faculty of Biological and Environmental Sciences

ImmunoGarden invention and concept

- Gardening and landscaping materials enriched with health beneficial material containing forest-like microbial communities.
- Strengthens the immune system and reduces the probability of immune-mediated diseases, such as asthma, allergies and type 1 diabetes.
- Turf/sod, sand, soil and other related products.
- Sustainable solution: utilises forestry side streams, consists of natural ingredients.
- Preliminary scientific data proves that the immune response is activated when exposed to the developed material containing a diverse microbial community.

Mineral soil products, such as sandpit sand, gravelling sand and macadam developed in ImmunoGarden reduce the probability of immune-mediated diseases.

Patents

FI20175196
PCT/FI2018/050140

Key Publications

Nurminen et al. 2018. Nature-derived microbiota exposure as a novel immunomodulatory approach. Future Microbiology 13: 737–744
Parajuli et al. 2018. Urbanization reduces transfer of diverse environmental microbiota indoors. Frontiers in Microbiology 9: 84
Grönroos et al. 2018. Short-term direct contact with soil and plant materials leads to an immediate increase in diversity of skin microbiota. MicrobiologyOpen 2018: e645

HELSINKI INNOVATION SERVICES

Your commercial contact at HIS

Milla Koistinaho
Chief Operating Officer
+358 44 590 0603
milla.koistinaho@helsinki.fi

UNIVERSITY OF HELSINKI