

Tottori Resource Recycling, Inc announces the start of the pilot project for a table grape farm in the Republic of South Africa

(Tottori, Japan, 23rd August 2019) Tottori Resource Recycling, Inc (“TRR”). has introduced its soil conditioner, Porous Alpha, as a pilot project for a table grape farm, UITVLUGT in Western Cape. With Porous Alpha, it is expected to increase the water utilisation efficiency, which will result in the higher harvest with the same input and/or the same harvest with less input such as water and fertiliser.

South Africa has suffered from recurrent drought and low precipitation. Though the government has realised various irrigation projects and table grape growers introduced various technologies, the availability of water resources is still one of the significant bottlenecks for the table grape industry in South Africa.

Porous Alpha, a multi-functional foamed glass manufactured by recycling technology on used glass bottles, has shown various track records to increase the water utilisation efficiency for vegetables and fruit trees in various countries such as Japan, China, UAE, Morocco, among others. (You can see some of the projects [here](#).)

This pilot project is hosted by the farm owner with the financial and technical support by [the Japanese Ministry of Agriculture, Forestry and Fishery \(“MAFF”\)](#), and [Agricultural Research Council \(“ARC”\)](#). TRR provides the soil conditioner, Porous Alpha, and technical support on it. and ARC provides technical support, especially on the experimental design and the methodology to control the irrigation amount. Dr. Myburg, ARC comments that “Agriculture industry of South Africa faces the serious issue of drought. if Porous Alpha can reduce irrigation water, this technology would contribute many farmers”. Mr. Kriel, the table grape farm “UITVLUGT” shows expectation and said “if it is possible to save irrigation water, the planted area can be expanded, and the harvested quantity will increase. Also, by saving irrigation water continuously, more water can be stored in water reservoirs in preparation for the serious drought season. We can use limited water resources more effectively.”



Not only in South Africa but also all over the world, the significant water utilisation efficiency is required to feed the people in the future. According to the research by the World Resources Institute in 2018<sup>1</sup>, it is necessary to increase global food production by 56% by 2050. Though technical development such as better seed and/or fertiliser might be available, the additionally available water resource is quite limited because 70% of water resource is already used for agriculture Besides, the climate change can reduce precipitation in dry/arid area, which will lead to the severe water resource shortage.

Supported by private and public organizations, TRR continues to explore the opportunity to contribute to improving the global by applying our multi-functional foamed glass material, Porous Alpha.

###

<sup>1</sup> <https://www.wri.org/blog/2018/12/how-sustainably-feed-10-billion-people-2050-21-charts>