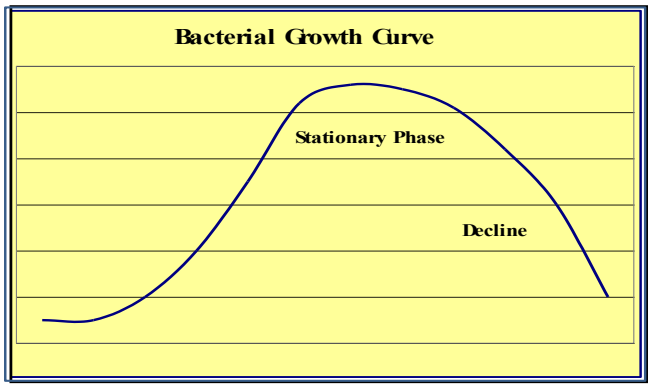
Xcelbio Treatment
Pit Latrines and Septic

Xcelbio resolves the problems of emtying pit latrines

In pit latrines and septic tanks there are hundreds of different species of bacteria coexisting and trying to metabolise and breakdown the sludge waste.

Finally a stage in the process is reached when they cannot breakdown their own waste products, and the environment starts to have very unpleasant odours, this is mainly caused by short chain acid compounds and sulphurous molecules that cause the mal odours, which are bad for health and general well-being and attract flies and animals promoting the spread of deseases.



WHATS MISSING?

Xcelbio contains enhancing components that enable bacteria and Crenarchaeota to survive and flourish in the stressed environment and to break down the toxic chemicals……

WHATS MISSING?

Without Xcelbio, bacterial waste begins to build up and an increasing amount of sludge accumulates, much of it being dead bacteria. The efficiency in the waste breakdown process declines and the classic problems begin.

XCELBIO REMOVES ODOURS

Xcelbio promotes the breakdown and metabolising of the waste and converts it into water, nitrogen gas, carbon dioxide and other simple compounds that complete the natural cycle of metabolic reaction.

Field trials have proven that Xcelbio promotes and accelerates organisms required for the breakdown of sludge waste.

Few technologies have any real impact on mal odours, but tests carried out with Xcelbio have proved to be effective in reducing both mal odours and sludge waste.
Tests with Xcelbio were conducted on sewage waste containing 4% solids. Three trials were conducted each using 200 ml of water with sewage and 200 ml sewage with the addition of Xcelbio Samples were placed in 150 litre waste containers to enable monitoring of the odours.

Within 4 hours the odours from the Xcelbio treated containers had declined dramatically and had virtually no odour, whereas the untreated containers showed an increase in the level of Mal odours.

For sales and technical enquiries contact: infoxcelbio@gmail.com

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TYPICAL REFUGEE CAMP LATRINE

Once the Xcelbio migrate into the bacterial wastes, they enhance and increase the metabolic reaction that breaks down the sludge.

Consequently the accumulation of waste due to the activity is reversed. Any compounds that the bacteria cannot breakdown will be metabolised.

Whenever Xcelbio is applied there is a significant reduction in accumulated solids. In a typical large waste sludge lagoon measurable reductions occur in the following:

- Total Solids
- Volatile suspended Solids
- Nitrogen compounds
- Phosphorus
- PCB'S

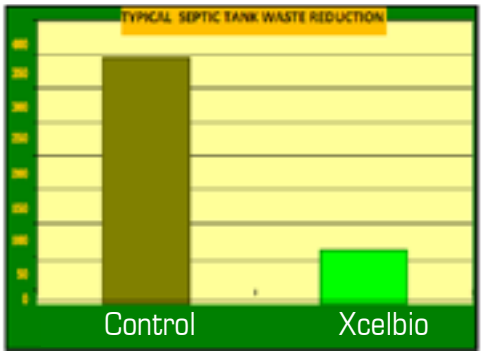
LIQUIDS PHASE

When the particle size of sludge waste is reduced, it becomes suspended in the liquid. Bacretia/enzymes do not have the capacity to reduce the suspended solids further. The suspended solids then add to the accumulated sludge waste volume. By applying Xcelbio there is a symbiotic reaction enhancing the bacteria enabling the toxins to be neutralised, thus enhancing the biological process.

SEPTIC TANKS

Field trials have shown that when Xcelbio is applied on a continuous basis to the septic tank there are significant reductions in both sludge waste and

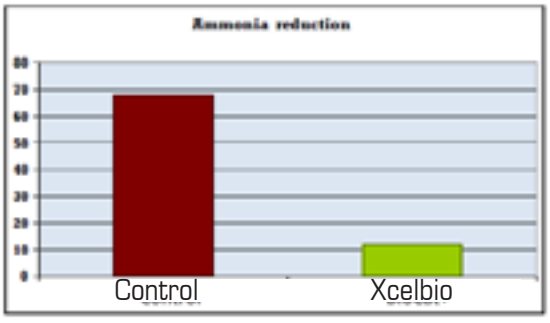
The graph below shows the reduction against the control after 75 days.



SEPTIC TANKS

At the same time that solids are reduced the waste is completely broken down and reduced to the basic elements. This can elliminate the need to empty or dig new

Chart showing ammonia reduction



Xcelbio is rehydrated and fermented on site with the catalyst generation unit (CGU) and dosed directly into the application 24/7 via degradable Xcelbio cartridges, dosed weekly or alternative days depending on the application and the organic loading.

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Natural solutions for man-made problems

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