



## Southern Ambition 919 cc

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## **SUNDEWZYME**

### **Mortality Pits**

#### **DISPOSAL OF ABATTOIR WASTE, POULTRY MORTALITIES AND FARM WASTE**

After a number of years experimenting, the optimum-sized treated, translucent fibreglass dome was perfected, incorporating a combined flytrap / air vent & observation window and self-sealing flap valve.

The unit, known as the **SUNDEW BIOLOGICAL PIT COVER** is placed on an IBR / corrugation platform which is covered by a 150mm layer of insulating soil over a pit having a maximum capacity of 75 cubic-meters per fibreglass dome.

Disposal of organic matter within such a pit is about 6 weeks and the feeding rate is approx 2kg of wet flesh per day per cubic meter. Hard indigestible feathers and high calcium bones are not disposable which reduces the rate by 30%.

The function of the Sundew pit cover is quite simple. Ever present ants enter via the earth walls. Ultra-violet and infrared rays enter via the translucent fibreglass dome, thus heating the pit during the day and helping to expel bad odours via the flytrap vent, which attracts flies and other predatory insects. At night fresh air is sucked into the pit and the anaerobic and aerobic decaying process is speeded up.

Flies, ham and hide beetles enter via the flytrap (some eggs and larvae are imported with wet flesh) which contains natural enzymes. These predatory insects are quite content to feed and breed within this environment, those that escape are noted to circle about and return to the pit. Although the domestic fly is the most common fly attracted to the pit, ultimately the blowfly, hide and ham beetles dominate the pit, even if enzymes are added.

By adding **SUNDEWZYME** at the rate of 1 to 1.5gm per kg of wet flesh, the decomposition process within a **SUNDEW DOMED PIT** is reduced to 17—20 days and bad odours are eliminated. The feeding rate within an enzyme-activated pit is increased to 4kg wet flesh per cubic-meter per day at a cost of less than 17 cents per kg of wet flesh. The use of this type of solar-heated pit within built-up areas is encouraged because bad odours are eliminated and although flies breed within the unit, they are content to remain. Using 1 to 1.5gm of **SUNDEWZYME** per kg of dead weight of chicken there is a very rapid breakdown of the carcass, which then liquidifies and is absorbed into the soil and only feathers and bones remain. It is obvious that the **SUNDEW** fibreglass dome type solar-heated pits together with enzymes provide the economic answer to disposal. It is noted that by using the enzymes, the life of the pit would be extended.

## SUNDEWZYME FORMULA

### The Mortality Pit feeding rate formula:

1. Convert/calculate the daily mortalities into kgs per day
2. Depending on soil conditions and terrain use the following pit dimensions  
2m x 2m x 2m pit = 8 cubic meters = feeding rate of 24 kilograms per day  
3m x 3m x 3m pit = 27 cubic meters = feeding rate of 81 kilograms per day  
4m x 4m x 4m pit = 64 cubic meters = feeding rate of 192 kilograms per day
3. Divide kilograms in (1) by 81kgs to determine the number of pits required.
4. The feeding rate of a 27 cubic meter pit is 81kgs calculated at 3kgs per cubic per day (maximum)

The above is an average formula used to ensure optimum pit performance. This formula can vary slightly.

### SUNDEWZYME CONSUMPTION:

1. Convert/calculate daily mortalities into kilograms per day.
2. Divide kilograms in (1) above by between 1000, 1200 or 1500 grams (being dosage) to determine daily **Sundewzyme** consumption in grams.
3. Multiply grams in (2) above by 30 to determine the monthly consumption of **Sundewzyme** in grams/kg.

### DOSAGE:

- I.E.: 1 kgs **SUNDEWZYME** will treat 1000 birds, if each bird weights 1kg. 1-1 ratio.  
1 kgs **SUNDEWZYME** will treat 833 birds, if each bird weights 1kg. 1-1.2 ratio.  
1 kgs **SUNDEWZYME** will treat 667 birds, if each bird weights 1kg. 1-1.5 ratio.

Every 1kg of mortality requires between 1 gram and 1.5grams of **Sundewzyme**. A dosage of 1.5 grams is recommended as a start up booster dose.

This formula must be adhered to for the efficient running of the pit. If the pit is fed correctly with mortalities and **Sundewzyme**, the consumption of **Sundewzyme** will be less. If **Sundewzyme** is given ad hoc, the more you will need to ensure optimum efficiency.