



National Bee Unit Southern Region

Integrated Varroa Management 4.

Guide Tables

The table below has been drawn up using data from the graphs in the, handout '*Treatment Thresholds*'. It gives a simplified plan of what to do when you have estimated daily mite mortality. It can be adapted to suit your own needs.

The best method of deciding what action to take is calculating the mite population in the colony and using the treatment threshold graph.

Seasonal Action

| | Average Natural Mite Mortality per Day | | |
|------------------------------|--|--|-----------------------------------|
| Jan. to March | Less than 2 <i>No Action</i> | Between 2 and 7 <i>Plan Control for coming Season</i> | Over 7 <i>Consider Control</i> |
| April to June | Less than 1 <i>No Action</i> | Between 2 and 7 <i>Light Control</i> | Over 7 <i>Severe Risk</i> |
| July and August | Less than 2 <i>No Action</i> | Between 2 and 8 <i>Light Control</i> | Over 8 <i>Severe Risk</i> |
| September to December | Less than 6 <i>No Action</i> | Between 6 and 8 <i>Light Control</i> | Over 8 <i>Severe Risk</i> |

If you are assessing mite populations using the '**Quick Guide**' in the , *Measurement of Varroa Mite Populations*' handout, i.e. making a quick assessment by forking out drone pupae, then handy tables can be made up as overleaf. It must be pointed out that this is a rough guide only and is dependant upon drone brood being present. It may be helpful if routine drone brood removal is practised as the pupae can be easily examined for infestation.

These tables are drawn up based on an assumption that the brood nest contains 20,000 occupied brood cells, of which 5% are drone.

Drone Brood Tables

| Table 1. | <i>Number of Infested Drone Pupae</i> | | |
|----------------------|---------------------------------------|--|---|
| Up to June | Less than 1 in 60 <i>No Action</i> | Between 1 in 60 & 1 in 25 <i>Plan Control for the Coming Season</i> | Over 1 in 25 <i>Consider Control</i> |
| June and July | Less than 1 in 30 <i>No Action</i> | Between 1 in 30 & 1 in 15 <i>Light Control</i> | Over 1 in 15 <i>Severe Risk</i> |
| August | Less than 1 in 20 <i>No Action</i> | Between 1 in 20 & 1 in 10 <i>Light Control</i> | Over 1 in 10 <i>Severe Risk</i> |

| Table 2. | <i>Proportion of Infested Drone Pupae</i> | | |
|----------------------|---|--|------------------------------------|
| Up to June | Less than 2% <i>No Action</i> | Between 2% & 4% <i>Plan Control for the Coming Season</i> | Over 4% <i>Consider Control</i> |
| June and July | Less than 3% <i>No Action</i> | Between 3% & 7% <i>Light Control</i> | Over 7% <i>Severe Risk</i> |
| August | Less than 5% <i>No Action</i> | Between 5% & 10% <i>Light Control</i> | Over 10% <i>Severe Risk</i> |

These two tables are a rough guide only.

As the least rough guide, 15% of drone brood infested indicates a colony that may collapse

The tables are based on a 'worst case scenario'.