

VERMONT AGENCY OF AGRICULTURE

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PLANT INDUSTRY DIVISION

SACBROOD DISEASE

Cause: A virus.

Effect: Sacbrood is a widely distributed disease, but it usually does not cause serious colony loss. However, the beekeeper should learn to recognize sacbrood so it will not be mistaken for the serious foulbrood diseases.

Symptoms: Sacbrood may appear at any time during the brood-rearing season, but it is main honey flow starts. Scattered among the healthy brood cells are cells containing dead brood. Their cappings are dark and may be punctured or partly removed by the adult bees. About the time the cell is sealed, the larva dies from the virus. When it does, the head end turns up like the end of a canoe, and remains in that position. The pearly white color of the larva darkens and the skin becomes tough. At this stage, the larva, which resembles a liquid-filled sac, can be removed from the cell intact; hence the name, *sacbrood*. The dead larva continues to dry and harden until the dried-down scale is almost black. The head end is usually the darkest. Scales of larvae dead of sacbrood can be removed easily.

Transmission: The virus is probably fed to the young larva by the nurse bees in the brood food. It multiplies rapidly within the larva until it causes death. Then the house bees cleaning out the cells probably distribute the virus to other larvae within the hive. The disease is usually limited to one or a few colonies in an apiary.

Control: No known control exists. In severe cases, moving the colony or re-queening may help. Colonies usually recover from sacbrood without beekeeper aid.

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The Vermont Agency of Agriculture can help with many questions about bees and beekeeping. **Contact:** Steve Parise, Apiculturist, Vermont Agency of Agriculture, 116 State Street, Drawer 20, Montpelier, VT 05620-2901. E-mail: steve.parise@state.vt.us. www.vermontagriculture.com

