

## VERTICILLIUM WILT ON RAPE SEED

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### INTRODUCTION

*Verticillium dahliae* is the most serious disease on winter rape in Sweden. Especially in the southwest part where rape has been grown since the last war. The disease, which is a crop rotation problem, are now showing up in different parts of Europe. This indicate that the fungus could be of significant importance outside Sweden too.

### SYMPTOMS

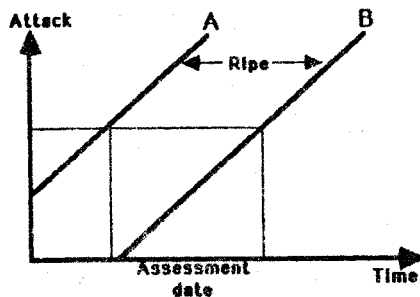
The first symptoms are light green color of the stem. Often half of the stem is attacked.

Some days later the color turns to brown.

Later on the stem will be whitish with huge amounts of black micro-sclerotia.

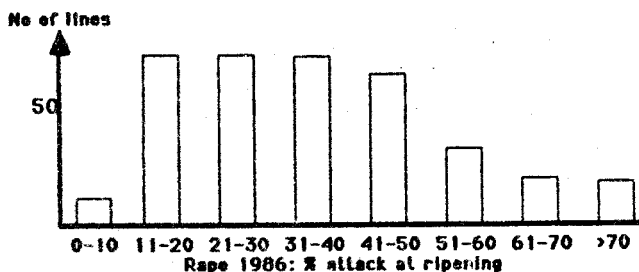
Stem will broke.

### RIPENING AND DISEASE ATTACK



Variety A and B are equally susceptible, but B is later in ripening. The late variety would then look more resistant if the assessment is done on the same day. To be comparable, the assessment should be performed in equal stage of ripening. At Svalöf all breeding material are assessed at the same stage of maturity, at ripening stage  $\pm 1$  day.

### RESISTANCE



In more resistant lines the symptoms are developed later and the plants will be healthy or just slightly attacked at harvest time.

No variety with complete resistance on heavily infected soils has yet been found. But there is a wide variation within the breeding material when compared at ripening.