

Explanation of Plates

Plate I

1. Symptom of *Fusarium* basal rot of onions in nursery bed.
The part of stemplate and the lower part of scales were browning.
2. Incipient symptom of the diseased onion in the main field (Observed in late May to early June).
- 3-6. Various symptoms of basal rot of onions in the main field.
3. Curving of leaves.
4. Rot of stemplate and scales.
5. Basal rot and wilting of leaves.
6. Bottom rot, roots of onions are decayed.

Plate II

- 1-3. Various symptoms of basal rot in the main field.
1. The left one is healthy, the others are diseased.
2. Diseased bulbs at harvest.
4. Symptom of the diseased onions in the seed farm. The right one is diseased. Lower leaves are severely wilted.
5. Symptom in the seed farm at harvest. Stemplates and root are decayed.

Plate III

1. Mother onions inoculated by *Fusarium oxysporum* f. sp. *cepae* (See Fig. 11) The left one is control.
2. Inoculation on scale of onions (See Fig. 10).
Right (bottom to up): inoculated by the isolate of *F. oxysporum* f. sp. *cepae* from rice, cucumber or pig weed, respectively.
Left: The upper one is control and the others are inoculated by *Fusarium oxysporum* f. sp. *cepae*.
3. Longitudinal section of the stemplate infested by *F. oxysporum* f. sp. *cepae* (See Fig. 9).
4. do. The left one is control.
5. do. The left one is control. The roots of infected onion are repressed to grow.
6. Damping off of seedlings infested by *F. oxysporum* f. sp. *cepae*. The left is control.

Plate IV

1. Isolation of *F. oxysporum* f. sp. *cepae* from the stemplates of onions which showed no symptom with naked eyes.
- 2-4. Microscopical observation of invasion of *F. oxysporum* f. sp. *cepae* into stemplate or root of onions (See Fig. 19) Continued on Plate V.
2. Hyphae in the dead tissue of root.
2. Hyphae in the tissue of root and stemplate.
4. Hyphae in the dead tissue of cortex near stemplate.

Plate V (continued from Plate IV)

1. Mycelial mass in the dead tissue of cortex near stemplate.
2. Mycelia in the border of lignified root and parenchyma of stemplate.
3. Mycelia in the parenchyma of stemplate.
4. Tylosis-like complex produced in the vascular bundle of stemplate.
5. Chlamidospores formed in the collapsed root.

Plate I

Plate II

