

00268

CERTIFICATE IN SERICULTURE

Term-End Examination

June, 2010

BLP-004 : CROP PROTECTION

Time : 2 hours

Maximum Marks : 50

Note : This paper has three questions. Answer any two questions. Marks for each question are indicated against it.

1. (a) Answer any five question in 5-7 sentences each : 5x3=15
- (i) Why fungicides have two names and explain their utility ?
 - (ii) What are the meanings of the words caution, warning, danger and danger-poison ?
 - (iii) Describe the preventive measures to be followed against dermestid beetle.
 - (iv) How to manage Grasserie disease in mulberry silkworm ?
 - (v) Why the silkworm rearing house is disinfected ?
 - (vi) How do you identify the root knot and root rot diseases in mulberry.

(b) Choose the correct answer : 10x1=10

- (i) The occurrence of dermestid beetle is observed :
- (A) Through out the year
 - (B) Only during summer
 - (C) Only during winter
 - (D) Only during rainy season
- (ii) Parasitoid *Tefrastichus howardic* is recommended for control of :
- (A) White fly
 - (B) Leaf roller
 - (C) Jassid
 - (D) Thrips
- (iii) 'Hopper burn' is due to the attack of :
- (A) Jassid
 - (B) Thrips
 - (C) White fly
 - (D) Mealy bug
- (iv) Collar rot in mulberry during nursery is caused by a :
- (A) Fungus
 - (B) Bacferium
 - (C) Virus
 - (D) Nematode
- (v) Nursery guard is prepared from :
- (A) *Fusarium solani*
 - (B) *Trichoderma harzianum*
 - (C) *Trichoderma pseudokoningii*
 - (D) *Botryodiplodia theobromae*

- (vi) The quantity of spray solution required for one acre garden to control foliar diseases is :
- (A) 180 litres
 - (B) 100 litres
 - (C) 500 litres
 - (D) 1000 litres
- (vii) Leaf blister in oak tasar host plants is caused by :
- (A) *Botryodiplodia theobromae*
 - (B) *Taphrina cacrulescurse*
 - (C) *Fusarium solani*
 - (D) *Alternaria alternata*
- (viii) White powdery patches appearing on the lower surface of leaves is a symptom of :
- (A) Leaf rust disease
 - (B) Bacterial leaf blight disease
 - (C) Fungal leaf blight disease
 - (D) Powdery mildew disease
- (ix) Cutting rot in mulberry is caused by :
- (A) *Phoma sorghina*
 - (B) *Botryodiplodia theobromae*
 - (C) *Fusarium solani*
 - (D) *Corcospora moricola*
- (x) Muscardine in Eri silkworm is caused by :
- (A) *Botrytis bassiana*
 - (B) *Bacillus thuringiensis var. sotto*
 - (C) *Beauveria bassiana*
 - (D) *Nosema bombycis*

2. (a) *Answer in one sentence :* 15x1=15

- (i) What causes the muscardine disease in muga silkworm ?
- (ii) What is the common name of Dithane M-45 ?
- (iii) Name important diseases of mulberry silkworm.
- (iv) Give the scientific name of thrips attacking mulberry.
- (v) Write the chemical control measure of leaf spot disease of mulberry.
- (vi) Name the causal agent of root knot disease of mulberry.
- (vii) Name the causal organism of stem Borer of som and soalu plants.
- (viii) How can you identify the eri silkworm infected with grasserie ?
- (ix) Name three important predators of Tasar silkworms.
- (x) What is the important symptom of muscardine disease in mulberry silkworm ?
- (xi) Write the scientific name of mealy bug attacking mulberry plants.
- (xii) What are the pests of Eri silkworm ?
- (xiii) Name the bed disinfectants used to prevent the muscardine disease of mulberry silkworm.

(xiv) What is the name of the biocontrol agent recommended for mealy bug control in mulberry ?

(xv) What is a Systematic fungicide ?

(b) Match the following : 10x1=10

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|--------------------------------------|----------------------------------------------|
| (i) Reduvid bug | (A) Disinfectant |
| (ii) <i>Telrastichus howardii</i> | (B) Pest of Eri silkworm |
| (iii) Fungal leaf blight of mulberry | (C) <i>Neothacris acuticeps nilgiriensis</i> |
| (iv) Wingless grass hopper | (D) Predator of Tasar silkworm |
| (v) Black Scar on mulberry silkworm | (E) <i>Botryodiplodia theobromae</i> |
| (vi) DDVP | (F) Biological control |
| (vii) Karathane | (G) Insecticide |
| (viii) Bleaching powder | (H) Fungicide |
| (ix) Stem canker | (I) <i>Fusarium pallidroseum</i> |
| (x) Cockroach | (J) Symptoms of uzifly attack |

3. (a) Write short notes on *any five* of the following in 2-3 sentences : 5x2=10

- (i) Raksha
- (ii) Red rust of Muga host plant
- (iii) Pebrine disease of Mulberry silkworm

- (iv) Preying Mantis attacking Tasar silkworms
 - (v) Stem borer of mulberry
 - (vi) Virosis of Tasar silkworm
 - (vii) Semi-looper pest of Eri silkworm
- (b) Fill in the blanks : 10x1=10
- (i) The safe period after spraying Bavistin against mulberry leaf spot is _____ days.
 - (ii) The disease spreading internally throughout the plant system is called _____ .
 - (iii) The leaf rust disease in mulberry in caused by _____ .
 - (iv) Seedling blight in Eri silkworm host plants in caused by _____ .
 - (v) Flacherie of muga silkworm is caused by _____ .
 - (vi) *Levillula taurica* causes _____ disease in Eri host plants.
 - (vii) The scientific name of mealy bug of mulberry is _____ .
 - (viii) Grasserie disease of Eri silkworm is caused by _____ .
 - (ix) The scientific name of uzifly of tasar silkworm is _____ .
 - (x) The scientific name of uzifly of mulberry silkworm is _____ .

(c) Tick the correct answer : 5x1=5

- (i) Antagonistic microbes are used for :
- (A) Chemical control of pests
 - (B) Biological control of diseases
 - (C) Physical control of pests
- (ii) Root knot disease in mulberry is a :
- (A) Seed borne disease
 - (B) Soil borne disease
 - (C) Air borne disease
- (iii) The target area of attack by mulberry white fly is :
- (A) Lower surface of leaf
 - (B) Upper surface of leaf
 - (C) Both the surfaces of leaf
- (iv) The causal agent of powdery mildew in castor plants is :
- (A) *Botryodiplodia theobromae*
 - (B) *Laveillula taurica*
 - (C) *Phyllactinia corylea*
- (v) Blue triangular mark on the pesticide pack indicates the presence of :
- (A) High amount of poison
 - (B) Negligible amount of poison
 - (C) Moderate amount of poison
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