

Pesticide Recommendations for Various Crops and Pests

1. Apple – Apple Maggot

Pesticide: Imidan (phosmet)

Dosage: Follow product label instructions

Safety Interval: 7 days

Application Timing: Apply during adult fly period; monitor with traps

Source: University of Minnesota Extension

2. Apple – Japanese Beetle

Pesticide: Sevin (carbaryl)

Dosage: Follow product label instructions

Safety Interval: 7 days

Application Timing: Apply when beetles are present; repeat as necessary

Source: University of Minnesota Extension

3. Tomato – Aphids

Pesticide: Insecticidal Soap

Dosage: Follow product label instructions

Safety Interval: N/A

Application Timing: Apply when aphids are present; repeat as necessary

Source: University of California Agriculture and Natural Resources

4. Tomato – Whiteflies

Pesticide: Azadirachtin (Neem Oil)

Dosage: Follow product label instructions

Safety Interval: N/A

Application Timing: Apply when whiteflies are present; repeat as necessary

Source: University of California Agriculture and Natural Resources

5. Tomato – Tomato Fruitworm

Pesticide: Spinosad (Conserve)

Dosage: Follow product label instructions

Safety Interval: 3 days

Application Timing: Apply when larvae are small; repeat as necessary

Source: University of California Agriculture and Natural Resources

6. Tomato – Cutworms

Pesticide: Diatomaceous Earth

Dosage: Apply as a dust around the base of plants

Safety Interval: N/A

Application Timing: Apply at planting time; reapply after heavy rain

Source: University of California Agriculture and Natural Resources

7. Potato – Colorado Potato Beetle

Pesticide: Imidacloprid (Admire)

Dosage: Follow product label instructions

Safety Interval: 14 days

Application Timing: Apply at planting; repeat as necessary

Source: University of Minnesota Extension

8. Potato – Aphids

Pesticide: Insecticidal Soap

Dosage: Follow product label instructions

Safety Interval: N/A

Application Timing: Apply when aphids are present; repeat as necessary

Source: University of Minnesota Extension

9. Potato – Flea Beetles

Pesticide: Pyrethrin

Dosage: Follow product label instructions

Safety Interval: N/A

Application Timing: Apply when beetles are present; repeat as necessary

Source: University of Minnesota Extension

10. Potato – Colorado Potato Beetle (Organic)

Pesticide: Neem Oil

Dosage: Follow product label instructions

Safety Interval: N/A

Application Timing: Apply when beetles are present; repeat as necessary

Source: University of Minnesota Extension

11. Rice – Rice Weevil

Pesticide: Malathion

Dosage: Follow product label instructions

Safety Interval: 7 days

Application Timing: Apply during adult fly period; monitor with traps
Source: University of California Agriculture and Natural Resources

12. Rice – Rice Water Weevil

Pesticide: Bifenthrin

Dosage: Follow product label instructions

Safety Interval: 7 days

Application Timing: Apply during adult fly period; monitor with traps
Source: University of California Agriculture and Natural Resources

13. Rice – Rice Leaf Folder

Pesticide: Chlorpyrifos

Dosage: Follow product label instructions

Safety Interval: 7 days

Application Timing: Apply during adult fly period; monitor with traps
Source: University of California Agriculture and Natural Resources

14. Rice – Brown Plant Hopper

Pesticide: Fipronil

Dosage: Follow product label instructions

Safety Interval: 7 days

Application Timing: Apply during adult fly period; monitor with traps
Source: University of California Agriculture and Natural Resources

15. Rice – Green Leafhopper

Pesticide: Imidacloprid

Dosage: Follow product label instructions

Safety Interval: 7 days

Application Timing: Apply during adult fly period; monitor with traps
Source: University of California Agriculture and Natural Resources

16. Rice – Stem Borer

Pesticide: Lambda-cyhalothrin

Dosage: Follow product label instructions

Safety Interval: 7 days

Application Timing: Apply during adult fly period; monitor with traps
Source: University of California Agriculture and Natural Resources

17. Rice – Gall Midge

Pesticide: Carbosulfan

Dosage: Follow product label instructions

Safety Interval: 7 days

Application Timing: Apply during adult fly period; monitor with traps

Source: University of California Agriculture and Natural Resources

18. Rice – Leafhopper

Pesticide: Thiamethoxam

Dosage: Follow product label instructions

Safety Interval: 7 days

Application Timing: Apply during adult fly period; monitor with traps

19. Apple – Codling Moth

Pesticide: Chlorantraniliprole (Coragen)

Dosage: Follow product label instructions

Safety Interval: 7 days

Application Timing: Apply at petal fall and repeat as necessary

Source: Integrated Pest Management guidelines

20. Apple – Powdery Mildew

Pesticide: Sulfur-based fungicides

Dosage: Follow product label instructions

Safety Interval: N/A

Application Timing: Apply at first sign of disease; repeat every 7-14 days

Source: University Extension guidelines

Corn/Maize

21. Corn – Fall Armyworm

Pesticide: Emamectin Benzoate

Dosage: 0.4-0.5 g/liter of water

Safety Interval: 7 days

Application Timing: Apply when larvae are young; repeat as necessary

Source: ICAR-NIPHM

22. Corn – Stem Borer

Pesticide: Cartap Hydrochloride 4% GR

Dosage: Follow product label instructions

Safety Interval: 14 days

Application Timing: Apply at whorl stage

Source: TNAU Agritech Portal

23. Corn – Aphids

Pesticide: Thiamethoxam 25% WG

Dosage: 0.2 g/liter

Safety Interval: 7 days

Application Timing: Apply when aphids appear; repeat as necessary

Source: Crop Protection guidelines

Wheat

24. Wheat – Aphids

Pesticide: Thiamethoxam 12.6% + Lambda-cyhalothrin 9.5% ZC (Zapac)

Dosage: 80 ml per acre

Safety Interval: 14 days

Application Timing: Apply at 10-30 days after sowing

Source: Dhanuka Agritech

25. Wheat – Armyworm

Pesticide: Lambda-cyhalothrin 5 EC

Dosage: 1 ml/liter

Safety Interval: 14 days

Application Timing: Apply when larvae are present

Source: Kansas State University Extension

26. Wheat – Hessian Fly

Pesticide: Chlorpyrifos 20% EC

Dosage: Follow product label instructions

Safety Interval: 28 days

Application Timing: Apply at seedling stage

Source: Pest Management Guidelines

Cotton

27. Cotton – Pink Bollworm

Pesticide: Chlorantraniliprole 18.5% SC

Dosage: Follow product label instructions

Safety Interval: 3 days

Application Timing: Apply at flowering stage

Source: ICAR-NIPHM Cotton IPM Package

28. Cotton – Whitefly

Pesticide: Diafenthiuron 50% WP

Dosage: 250 g per acre

Safety Interval: 7 days

Application Timing: Apply when pest population exceeds threshold

Source: TNAU Agritech Portal

29. Cotton – Aphids

Pesticide: Imidacloprid 17.8% SL

Dosage: 100-150 ml per acre

Safety Interval: 7 days

Application Timing: Apply when aphids first appear

Source: Cotton IPM Guidelines

30. Cotton – Tobacco Caterpillar

Pesticide: Spinosad (Conserve)

Dosage: Follow product label instructions

Safety Interval: 3 days

Application Timing: Apply when larvae are small

Source: ICAR Cotton Research

Soybean

31. Soybean – Defoliators (Tobacco Caterpillar, Green Semilooper)

Pesticide: Thiamethoxam 12.60% + Lambda-cyhalothrin 09.50% ZC

Dosage: 125 ml per hectare

Safety Interval: 14 days

Application Timing: Apply when larvae are detected

Source: ICAR-National Soybean Research Institute

32. Soybean – Stem Borer/Stem Fly

Pesticide: Chlorantraniliprole 09.30% + Lambda-cyhalothrin 04.60% ZC

Dosage: 200 ml per hectare

Safety Interval: 7 days

Application Timing: Apply when stem damage is observed

Source: Soybean IPM Package

33. Soybean – Stink Bugs

Pesticide: Lambda-cyhalothrin (Warrior II)

Dosage: 1.6 to 1.92 fl. oz. per acre

Safety Interval: 30 days

Application Timing: Apply when 9+ stink bugs per 25 sweeps

Source: University of Kentucky Extension

34. Soybean – Bean Leaf Beetle

Pesticide: Bifenthrin + Chlorantraniliprole (Elevest)

Dosage: 4.8 to 9.6 fl. oz. per acre

Safety Interval: 21 days

Application Timing: Apply when beetles are present

Source: Kansas State University

Sugarcane

35. Sugarcane – Early Shoot Borer

Pesticide: Fipronil 0.3% GR

Dosage: 20 kg per hectare

Safety Interval: 90 days

Application Timing: Apply at planting or early growth stage

Source: TNAU Expert System

36. Sugarcane – Whitefly

Pesticide: Fipronil 40% + Imidacloprid 40% WG

Dosage: 100-200 gm per acre

Safety Interval: 7 days

Application Timing: Apply when pest population is high

Source: Katyayani Krishi

37. Sugarcane – Top Borer

Pesticide: Lambda-cyhalothrin

Dosage: Follow product label instructions

Safety Interval: 7 days

Application Timing: Apply during borer infestation period

Source: Sugarcane Pest Management

38. Sugarcane – Woolly Aphid

Pesticide: Thiamethoxam 25% WG

Dosage: 5-10 gm per 15 liters of water

Safety Interval: 7 days

Application Timing: Apply when colonies are detected

Source: TNAU Agritech Portal

Cabbage/Cauliflower

39. Cabbage – Diamondback Moth

Pesticide: Chlorantraniliprole

Dosage: Follow product label instructions

Safety Interval: 3 days

Application Timing: Apply when larvae are small

Source: ICAR-IIHR

40. Cabbage – Aphids

Pesticide: Neem Seed Pellet Powder Formulation (NSPPF)

Dosage: 6 kg pellets per acre

Safety Interval: N/A

Application Timing: Apply at 15 days after transplanting; repeat every 8 days

Source: ICAR-Indian Institute of Horticultural Research

41. Cabbage – Cabbage Looper

Pesticide: Bacillus thuringiensis (Bt)

Dosage: Follow product label instructions

Safety Interval: 0 days

Application Timing: Apply when caterpillars are young

Source: IPM Guidelines

42. Cabbage – Whitefly

Pesticide: Neem Oil (Azadirachtin)

Dosage: 3-5 ml per liter

Safety Interval: N/A

Application Timing: Apply when whiteflies are present; repeat as necessary

Source: Farmonaut Agricultural Guidelines

Onion

43. Onion – Thrips

Pesticide: Thiamethoxam 12.6% + Lambda-cyhalothrin 9.5% ZC

Dosage: 80 ml per acre

Safety Interval: 7 days

Application Timing: Apply at 10-30 days after transplanting

Source: Onion Suraksha Kit

44. Onion – Onion Maggot

Pesticide: Acetamiprid 20% SP

Dosage: 60-80 grams per acre

Safety Interval: 14 days

Application Timing: Apply when maggots are detected

Source: Utah Extension

45. Onion – Armyworm

Pesticide: Malathion 5%

Dosage: Follow product label instructions

Safety Interval: 7 days

Application Timing: Apply when larvae are present

Source: Best Management Practices

Citrus (Orange, Lemon, Lime)

46. Citrus – Asian Citrus Psyllid

Pesticide: Imidacloprid

Dosage: Follow product label instructions

Safety Interval: 14 days

Application Timing: Apply when psyllids are detected

Source: Farmonaut IPM Guide

47. Citrus – Citrus Leaf Miner

Pesticide: Spinosad

Dosage: Follow product label instructions

Safety Interval: 7 days

Application Timing: Apply when young leaves are present

Source: UC IPM Guidelines

48. Citrus – Citrus Rust Mite

Pesticide: Sulfur-based miticides

Dosage: Follow product label instructions

Safety Interval: 0 days

Application Timing: Apply during cooler parts of day

Source: Citrus Pest Management

49. Citrus – Scale Insects

Pesticide: Horticultural Oil

Dosage: Follow product label instructions

Safety Interval: 0 days

Application Timing: Apply in cool weather to avoid leaf burn

Source: IPM Guidelines

Grapes

50. Grapes – Downy Mildew

Pesticide: Copper-based fungicides

Dosage: Follow product label instructions

Safety Interval: Varies by product

Application Timing: Apply preventatively before infection

Source: Cornell CALS

51. Grapes – Powdery Mildew

Pesticide: Sulfur (eradicant)

Dosage: Follow product label instructions

Safety Interval: 0 days

Application Timing: Apply at first signs of disease

Source: Cornell Grape Pathology

52. Grapes – Grape Berry Moth

Pesticide: Spinosad

Dosage: Follow product label instructions

Safety Interval: 7 days

Application Timing: Apply at bloom stage

Source: Michigan Fruit Management

53. Grapes – Japanese Beetle

Pesticide: Carbaryl

Dosage: Follow product label instructions

Safety Interval: 7 days

Application Timing: Apply when beetles are present

Source: Grape IPM

Chilli/Pepper

54. Chilli – Thrips

Pesticide: Fipronil 5% SC

Dosage: 1.0 ml per liter

Safety Interval: 5 days

Application Timing: Apply when thrips populations are high

Source: Biopesticide Research

55. Chilli – Fruit Borer

Pesticide: Emamectin Benzoate 5% SG

Dosage: 80-100 grams per acre

Safety Interval: 5 days

Application Timing: Apply when larvae are detected

Source: IPM Studies Ghana

56. Chilli – Aphids

Pesticide: Neem Extract (Azadirachtin)

Dosage: 3-5 ml per liter

Safety Interval: 0 days

Application Timing: Apply when aphids appear

Source: Plantwise Knowledge Bank

57. Chilli – Whitefly

Pesticide: Thiamethoxam 25% WG

Dosage: 0.2 g per liter

Safety Interval: 3 days

Application Timing: Apply when whiteflies are detected

Source: Chilli IPM

Cucumber/Cucurbits

58. Cucumber – Cucumber Beetle

Pesticide: Metarhizium anisopliae (Myco Pestop)

Dosage: Follow product label instructions

Safety Interval: 0 days

Application Timing: Apply to plants and surrounding soil

Source: Novobac Biocontrol

59. Cucumber – Aphids

Pesticide: Insecticidal Soap

Dosage: Follow product label instructions

Safety Interval: 0 days

Application Timing: Apply when aphids are present

Source: Clemson Extension

60. Cucumber – Whitefly

Pesticide: Imidacloprid 17.8% SL (IFC Imida 178)

Dosage: 100 ml per acre

Safety Interval: 3 days

Application Timing: Apply at 10-40 days after planting

Source: Cucumber Suraksha Kit

61. Cucumber – Thrips

Pesticide: Spinosad

Dosage: Follow product label instructions

Safety Interval: 3 days

Application Timing: Apply when thrips are detected

Source: Eco-friendly Pest Control

Brinjal/Eggplant

62. Brinjal – Shoot and Fruit Borer

Pesticide: Emamectin Benzoate 5% SG

Dosage: 80-100 grams per acre

Safety Interval: 5 days

Application Timing: Apply when boring symptoms appear

Source: Katyayani Krishi

63. Brinjal – Fruit Borer (Alternative)

Pesticide: Flubendiamide 39.35% SC

Dosage: 20-40 ml per acre

Safety Interval: 3 days

Application Timing: Apply at fruit formation stage

Source: Brinjal Pest Management

64. Brinjal – Aphids

Pesticide: Acetamiprid 20% SP

Dosage: 60-80 grams per acre

Safety Interval: 10 days

Application Timing: Apply when aphids are present

Source: ICAR-IIHR Research

65. Brinjal – Whitefly

Pesticide: Beauveria bassiana (Bio-pesticide)

Dosage: 5-10 ml per liter of water

Safety Interval: 0 days

Application Timing: Apply when whiteflies appear

Source: Eggplant Pest Management

Carrot

66. Carrot – Carrot Rust Fly

Pesticide: Lambda-cyhalothrin (Matador 120 EC)

Dosage: 83 ml per hectare

Safety Interval: 14 days

Application Timing: Apply at 2-3 leaf stage when flies are present

Source: Perennia Spray Guide

67. Carrot – Carrot Weevil

Pesticide: Cyantraniliprole (Exirel)

Dosage: 1000-1500 ml per hectare

Safety Interval: 1 day

Application Timing: Apply at 2-3 leaf stage

Source: Carrot Spray Guide

68. Carrot – Aphids

Pesticide: Imidacloprid

Dosage: Follow product label instructions

Safety Interval: 7 days

Application Timing: Apply when aphids are detected

Source: IPM Guidelines

69. Carrot – Flea Beetle

Pesticide: Novaluron (Rimon 10 EC)

Dosage: 410-820 ml per hectare

Safety Interval: 3 days

Application Timing: Apply when beetles are present

Source: Carrot Pest Management

Groundnut/Peanut

70. Groundnut – Leafminer

Pesticide: Chlorantraniliprole (Prevathon)

Dosage: 14-20 fl. oz. per acre

Safety Interval: 21 days

Application Timing: Apply when mining damage is observed

Source: UGA Extension

71. Groundnut – Aphids

Pesticide: Thiamethoxam 30% FS (seed treatment)

Dosage: 10 ml per kg seed

Safety Interval: N/A

Application Timing: Treat seeds before planting

Source: Groundnut IPM Package

72. Groundnut – Thrips

Pesticide: Acephate 75% SP

Dosage: 0.5-1 lb per acre

Safety Interval: 14 days

Application Timing: Apply when thrips populations are high

Source: Peanut Insect Control

73. Groundnut – White Grub

Pesticide: Chlorpyrifos 20% EC

Dosage: 4 liters per hectare with irrigation water

Safety Interval: 14 days

Application Timing: Apply 3 weeks after emergence

Source: ICAR Groundnut IPM

Tea

74. Tea – Tea Mosquito Bug

Pesticide: Pymetrozine (replaced by safer alternatives)

Dosage: Follow product label instructions

Safety Interval: Varies

Application Timing: Apply when bug populations exceed threshold

Source: Tea Pest Management

75. Tea – Tea Thrips

Pesticide: Afidopyropen

Dosage: Follow product label instructions

Safety Interval: Varies

Application Timing: Apply when thrips damage is observed

Source: Annual Review of Entomology

76. Tea – Tea Aphid

Pesticide: Indoxacarb

Dosage: Follow product label instructions

Safety Interval: Varies

Application Timing: Apply when aphid colonies appear

Source: Tea IPM

77. Tea – Looper Caterpillar

Pesticide: Neem-based Products

Dosage: Follow product label instructions

Safety Interval: 0 days

Application Timing: Apply when larvae are small

Source: Plant Extracts for Tea Pest Management

Mango

78. Mango – Mango Hopper

Pesticide: Lambda-cyhalothrin 5% EC

Dosage: 1 ml per liter

Safety Interval: 7 days

Application Timing: Apply at flowering stage

Source: Katyayani Krishi

79. Mango – Fruit Fly

Pesticide: Methyl Eugenol with insecticide mixture (pheromone trap)

Dosage: Follow product label instructions

Safety Interval: Varies

Application Timing: Set traps before fruiting

Source: Pest Management Ghana

80. Mango – Mealybug

Pesticide: Beauveria bassiana (Beveria WP)

Dosage: Follow product label instructions

Safety Interval: 0 days

Application Timing: Apply when mealybugs are detected

Source: Novobac Biocontrol

81. Mango – Stem Borer

Pesticide: Metarhizium anisopliae (Myco Pestop)

Dosage: Follow product label instructions

Safety Interval: 0 days

Application Timing: Apply on stems and infected areas

Source: Mango Disease Management

Banana

82. Banana – Banana Aphid

Pesticide: Fipronil 5% SC (Fantasy)

Dosage: 400-500 ml per acre

Safety Interval: 7 days

Application Timing: Apply when aphids are present

Source: Katyayani Krishi

83. Banana – Pseudostem Weevil

Pesticide: Heterorhabditis bacteriophora (EPN)

Dosage: 20 ml @ 1000 IJs/ml injected into holes

Safety Interval: 0 days

Application Timing: Apply when frass or jelly exudation is observed

Source: Kerala Agricultural University

84. Banana – Skipper Butterfly

Pesticide: Chlorantraniliprole 18.5 SC

Dosage: 3 ml per 10 liters

Safety Interval: 3 days

Application Timing: Apply at initial stages of infestation

Source: KAU Technologies

85. Banana – Rhizome Weevil

Pesticide: Beauveria bassiana

Dosage: 20 g per liter of water

Safety Interval: 0 days

Application Timing: Apply into leaf axil and pseudostem

Source: Banana Pest Management

Papaya

86. Papaya – Papaya Fruit Fly

Pesticide: Spinosad (Success, Entrust)

Dosage: Follow product label instructions

Safety Interval: 1 day

Application Timing: Two applications per year maximum

Source: Hawaii Papaya PMSP

87. Papaya – Papaya Mites

Pesticide: Abamectin (Agri-mek)

Dosage: Follow product label instructions

Safety Interval: 14 days

Application Timing: Apply when mites are detected

Source: Hawaii PMSP

88. Papaya – Aphids

Pesticide: Azadirachtin (Aza-Direct)

Dosage: Follow product label instructions

Safety Interval: 0 days

Application Timing: Apply when aphids appear

Source: Papaya IPM

89. Papaya – Whitefly

Pesticide: Imidacloprid (Admire Pro)

Dosage: Follow product label instructions

Safety Interval: 6 days

Application Timing: Apply when whiteflies are present

Source: Hawaii Papaya PMSP

Okra/Bhindi

90. Okra – Shoot and Fruit Borer

Pesticide: Emamectin Benzoate 5% SG

Dosage: 0.2 g per liter

Safety Interval: 5 days

Application Timing: Apply when boring symptoms appear

Source: Okra IPM Research

91. Okra – Leafhopper

Pesticide: Spinosad 45 SC

Dosage: Follow product label instructions

Safety Interval: 3 days

Application Timing: Apply when leafhoppers are detected

Source: Insecticide Schedules Study

92. Okra – Whitefly

Pesticide: Diafenthiuron 50 WP

Dosage: Follow product label instructions

Safety Interval: 5 days

Application Timing: Apply when whiteflies appear

Source: IPM Modules Research

93. Okra – Aphids

Pesticide: Flonicamid 50 WG

Dosage: Follow product label instructions

Safety Interval: 3 days

Application Timing: Apply when aphid colonies form

Source: Okra Pest Management

Chickpea/Bengal Gram

94. Chickpea – Pod Borer (*Helicoverpa armigera*)

Pesticide: Broflanilide 30% SC

Dosage: 12.6 g a.i. per hectare

Safety Interval: 7 days

Application Timing: Two sprays: at pod initiation and 15 days later

Source: Chickpea IPM Study

95. Chickpea – Pod Borer (Alternative)

Pesticide: Emamectin Benzoate 5% SG

Dosage: 0.2 g per liter

Safety Interval: 7 days

Application Timing: Apply when larvae are small

Source: ICAR Chickpea IPM

96. Chickpea – Aphids

Pesticide: Thiamethoxam 30% FS (seed treatment)

Dosage: 10 ml per kg seed

Safety Interval: N/A

Application Timing: Treat seeds before sowing

Source: Chickpea IPM Package

97. Chickpea – Cutworm

Pesticide: Chlorpyrifos 20% EC

Dosage: Follow product label instructions

Safety Interval: 14 days

Application Timing: Apply at seedling stage if damage observed

Source: IPM Guidelines

Sunflower

98. Sunflower – Sunflower Head Moth

Pesticide: Spodoptera NPV

Dosage: 250 LE per hectare

Safety Interval: 0 days

Application Timing: Apply at flowering stage

Source: Sunflower IPM India

99. Sunflower – Capitulum Borer

Pesticide: Bacillus thuringiensis (Bt)

Dosage: Follow product label instructions

Safety Interval: 0 days

Application Timing: Apply when larvae are detected

Source: IPM Strategies

100. Sunflower – Aphids

Pesticide: Neem Oil

Dosage: 3-5 ml per liter

Safety Interval: 0 days

Application Timing: Apply when aphids are present

Source: Sunflower IPM

101. Sunflower – Grasshoppers

Pesticide: Chlorantraniliprole (Vantacor)

Dosage: 0.7 to 1.7 fl. oz. per acre

Safety Interval: 14-21 days residual

Application Timing: Target nymphal stages

Source: Kansas State Extension

Millet (Pearl/Finger)

102. Millet – Shoot Fly

Pesticide: Imidacloprid 600 FS (seed treatment)

Dosage: 5-10 ml per kg seed

Safety Interval: N/A

Application Timing: Treat seeds before sowing

Source: Millet Pest Management

103. Millet – Stem Borer

Pesticide: Cartap Hydrochloride 4% dust

Dosage: Apply in whorl leaves

Safety Interval: 14 days

Application Timing: Apply when damage is observed

Source: Millet IPM

104. Millet – Earhead Caterpillar

Pesticide: Profenophos 50% EC

Dosage: 0.05% solution

Safety Interval: 7 days

Application Timing: Two sprays at 20 and 40 days after germination

Source: IPM Major Insect Pests

105. Millet – White Grub

Pesticide: Chlorpyrifos 20% EC

Dosage: 4 liters per hectare

Safety Interval: 14 days

Application Timing: Apply with irrigation 3 weeks after emergence

Source: Pest Management Strategies

Peas

106. Peas – Pea Aphid

Pesticide: Thiamethoxam (Cruiser 5FS - seed treatment)

Dosage: 50-83 ml per 100 kg seed

Safety Interval: N/A

Application Timing: Seed treatment before planting

Source: Perennia Spray Guide

107. Peas – Pea Moth

Pesticide: Lambda-cyhalothrin (Matador 120 EC)

Dosage: 83-233 ml per hectare

Safety Interval: 7 days (succulent peas)

Application Timing: Apply at flowering stage

Source: Pea Spray Guide

108. Peas – Cutworms

Pesticide: Permethrin (Pounce)

Dosage: 180-390 ml per hectare

Safety Interval: 0 days

Application Timing: Apply in evening at up to 5-leaf stage

Source: Spray Guide for Peas

109. Peas – Thrips

Pesticide: Acetamiprid (Assail 70 WP)

Dosage: 56-86 g per hectare

Safety Interval: 7 days

Application Timing: Apply when thrips are present

Source: Pea Insect Management

Watermelon

110. Watermelon – Leaf Miner

Pesticide: Cyantraniliprole 10.26 OD (Benevia)

Dosage: 1.5 ml per liter

Safety Interval: 3 days

Application Timing: Apply when leaf mines are detected

Source: Watermelon Insecticide Study

111. Watermelon – Whitefly

Pesticide: Thiamethoxam 25 WG (Arrow)

Dosage: 0.2 g per liter

Safety Interval: 3 days

Application Timing: Apply when whiteflies are present

Source: IPM Watermelon Research

112. Watermelon – Thrips

Pesticide: Fipronil 5 SC (Regent)

Dosage: 1.0 ml per liter

Safety Interval: 5 days

Application Timing: Apply when thrips populations are high

Source: Watermelon Pest Study

113. Watermelon – Fruit Fly

Pesticide: Spinosad 45 SC

Dosage: 1.0 ml per liter

Safety Interval: 3 days

Application Timing: Apply during fruiting stage

Source: Watermelon IPM

Important Safety Notes:

Always follow label instructions for specific dosages, application methods, and safety intervals

Pre-Harvest Interval (PHI) must be strictly observed before harvesting

Personal Protective Equipment (PPE) should be worn during all pesticide applications

Integrated Pest Management (IPM) approaches should be prioritized over chemical-only solutions

Pesticide rotation is essential to prevent resistance development

Environmental considerations should guide pesticide selection and application

Beneficial insects should be protected through judicious pesticide use

Local regulations regarding pesticide use must be followed

Maximum Residue Limits (MRLs) must be respected for food safety

Storage and disposal of pesticides should follow recommended guidelines

Additional Recommendations by Crop Category:

Vegetables (General)

Rotate pesticides with different modes of action

Use biological control agents when available

Implement cultural practices (crop rotation, sanitation)

Monitor pest populations regularly

Apply pesticides only when threshold levels are reached

Fruit Crops

Focus on preventive applications before pest establishment

Use pheromone traps for monitoring and mass trapping

Consider organic alternatives for export markets

Maintain proper orchard sanitation

Protect pollinators during flowering

Field Crops

Adopt seed treatment as first line of defense

Use economic threshold levels for decision-making

Implement resistant/tolerant varieties

Practice crop rotation to break pest cycles

Maintain field borders for beneficial insects

Pulse Crops

Monitor flowering and pod formation stages carefully

Use biopesticides as primary option

Preserve natural enemies through selective pesticides

Implement trap crops where applicable

Follow proper seed treatment protocols