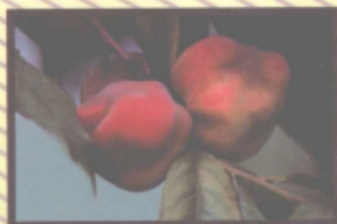


GUOSHU BINGCHONGHAI ZHENDUAN YU FANGZHI YUANSE TUPU

# 果树病虫害诊断与防治 原色图谱

王国平 窦连登 主编



JINDUN CHUBANSHE

金盾出版社

GUOSHU BINGCHONGHAI ZHENDUAN YU FANGZHI YUANSE TUPU

责任编辑: 李 钦

封面设计: 吴大伟

# 果树病虫害诊断与防治 原色图谱



ISBN 7-5082-2012-9



9 787508 220123 >



ISBN 7-5082-2012-9

S · 792 定价: 98.00 元

# 果树病虫害诊断 与防治原色图谱

ATLAS OF DIAGNOSIS AND CONTROL FOR PESTS  
AND DISEASES OF FRUIT TREES IN CHINA

主 编 王国平 窦连登

## 落叶果树病虫害

PESTS AND DISEASES OF DECIDUOUS FRUIT TREES

副主编 王金友 冯明祥

编著者 王国平 窦连登 王金友 冯明祥

侯保林 王 克 刘 兵 洪 霓

王江柱 张泽华

## 常绿果树病虫害

PESTS AND DISEASES OF EVERGREEN FRUIT TREES

副主编 罗禄怡

编著者 罗禄怡 王德其 韦党阳 孙宗仁

金 盾 出 版 社

## 内 容 提 要

本书由华中农业大学王国平教授和中国农业科学院果树研究所窦连登研究员主编,彩色图片由专业科研人员拍摄。书中以病虫彩色图片为主,辅以简要文字说明,介绍了苹果、梨、山楂、桃、李、杏、樱桃、枣、柿、草莓、葡萄、猕猴桃、板栗、核桃、无花果等 15 种落叶果树和柑橘、香蕉、龙眼、荔枝、芒果、枇杷、番木瓜、杨梅等 8 种常绿果树共 23 种果树的 566 种病虫害,其中病害 308 种,害虫 258 种,彩色图片 1440 余幅,记录种类比较齐全,病状、虫态形象逼真,展示了病害原色症状和害虫自然状态。该书内容丰富,科学实用,适合广大果农、农技推广人员及农业院校师生参考使用。

### 图书在版编目(CIP)数据

果树病虫害诊断与防治原色图谱/王国平,窦连登主编. —北京:金盾出版社,2002.9  
ISBN 7-5082-2012-9

I. 果… II. ①王…②窦… III. 果树-病虫害防治方法-图谱 IV. S436.6-64

中国版本图书馆CIP数据核字(2002)第043256号

### 金盾出版社出版、总发行

北京太平路5号(地铁万寿路站往南)

邮政编码:100036 电话:68214039 66882412

传真:68276683 电挂:0234

封面印刷:北京精美彩印有限公司

正文印刷:北京百花彩印有限公司

各地新华书店经销

开本:787×1092 1/16 印张:24 字数:150千字

2005年8月第1版第2次印刷

印数:11001—15000册 定价:98.00元

---

(凡购买金盾出版社的图书,如有缺页、  
倒页、脱页者,本社发行部负责调换)

# 前 言

我国是世界果树起源最早、种类最多的原产地之一。果树栽培历史悠久,种质资源丰富,在世界果树生产中有着极为重要的地位。果树生产是我国农业生产的重要组成部分,对增加农业产值,出口创汇,为农业发展积累资金,改善食品结构,丰富人民生活,繁荣市场均起着十分重要的作用。改革开放以来,我国果树业得到迅速发展,1995年全国果树面积达809.789万公顷,比1978年增长3.9倍,平均每年递增9.8%。目前,水果栽培面积和总产量均居世界首位。

随着果品产量的增加,供求关系发生了很大变化,市场竞争日趋激烈,使果树生产存在的严重问题更加暴露无遗。由于生产上品种单一化问题的加重,果树栽植密度的加大,病虫抗药性的加剧,明显改变了果树病虫害的生态环境,使其种群动态发生了很大的变化,生产上出现了一些新的危险性病虫害,一些过去次要发生的病虫害已上升为目前主要发生的病虫害,一些曾被控制的病虫害现再度猖獗,一些局部零星发生的病虫害已成为生产上的普遍问题,以至许多地方因识别诊断有误,或防治措施不当,造成了很大损失。及时准确地识别这些病虫害,并采取有效的防治办法,已成为果树生产上急需的重大技术之一。为了总结和反映近些年来我国果树病虫害发生情况和防治上取得的重大成就,进一步提高果树病虫害的科研、教学和生产防治水平,我们组织编著了这部《果树病虫害诊断与防治原色图谱》。

本书介绍了苹果、梨、山楂、桃、杏、樱桃、枣、柿、草莓、葡萄、猕猴桃、板栗、核桃、无花果等15种落叶果树和柑桔、香蕉、龙眼、荔枝、芒果、枇杷、番木瓜、杨梅等8种常绿果树共23种果树的566种病虫害,其中病害308种,害虫258种。彩色图片由华中农业大学、中国农科院果树所、青岛市农科所、河北农业大学、沈阳农业大学、贵州省黔南布依族苗族自治州农牧局、青岛市果树站的专业科研人员拍摄。在半个多世纪的岁月中,随着我国果树生产的迅速发展和果树病虫害的危害日趋复杂与严重,在与果树病虫害的斗争中,广大从事果树病虫害研究和防治的科技人员做了大量工作,积累了丰富的技术资料,大大促进了我国果树病虫害防治学的形成和发展,推动了防治技术水平的不断提高。本书是所有这些工作的概要总结,是众多单位和科技人员及广大基层农业技术推广工作者共同努力的结果。

在此书的编著过程中,得到农业部种植业管理司、全国农业技术推广中心、中国农业科学院、华中农业大学、河北农业大学、沈阳农业大学、贵州省农业厅、青岛市农业局等单位的领导、专家的大力支持和热情帮助,在此表示深深的感谢。并向金盾出版社及我所在工作单位华中农业大学和原工作单位中国农科院果树所为此书提供的出版机会和给予的关心致谢。

由于时间和水平所限,书中错误和疏漏之处在所难免,恳请专家同仁与广大读者批评指正。

华中农业大学 王 国 平

二〇〇二年一月于武汉

# Foreword

China is one of the most original and popular countries for fruit culture in the world and she has long history and rich germplasm resources of fruit trees and has a very important position in the world fruit production. The fruit cultivation is one of the necessary component parts of agricultural production in our country and has a bigger effect to agricultural production, product exchange, development cash, food construction, people life and the market. Since the reform and opening up, the fruit production get very quick development in our country. The total fruit culture areas of whole country have reached 8097.89 thousand hectares in 1995 and increased 3 times than that in 1978. Now both the total fruit area and yield of our country is the first in the world.

As increase of fruit yield, the relationship between supplying and buying has made much changes and market competition has become screamed more and more and there are some very serious problems in today fruit production of our country. Because of the single cultivation of cultivars and increase of planting density and resistance of pests and pathogen to pesticides, the ecological environment and occurrence for pests and pathogen has been changed seriously. There are some new pests and pathogen appearing on fruit trees and some common pests and pathogen in past has become dangerous ones now and some insects and diseases occurred only in local areas in past have be found in all fruit cultivation areas of whole country now so that the serious loss had been induced in many areas because that people could not know them or used incorrect control method. The control for pests and diseases of fruit trees has become one of the most important techniques of fruit production in our country. In order to resume and express the process of development and control for pests and direases of fruit trees in our country, we plan to publish the book named as atlas of diagnosis and control for pests and diseases of fruit trees in China.

We will introduce 566 species of diseases (308) and pests (258) of 23 species of fruits including 15 species of deciduous fruit trees as apple, pear, hawthorn, peach, plum, apricot, cherry, jujube, persimmon, strawberry, grapevine, Chinese gooseberry, chestnut, walnut, fig and so on, and 8 species of evergreen fruit trees including citrus, banana, longan, litchi, mango, loquat, papaya, Chinese strawberry and so on in this book. The symptoms of diseases and pests were photographed by scientists of 7 units. During half and more of a century, with the fast development of fruit production of our country, facing more and more complex and seriousness for the problems of fruit pests and diseases, the scientists and farmers have carried out a great deal of control work for fruit pests and diseases and collected much technique information. All these have emphasized the establishment and dvelopment for the theory of control for fruit pests and diseases in our country and made the technique level become more and more high. We will tell you all these works and research results in this book.

When this book has been writing, we get much help of Chinese Agricultural Ministry, the Center of Agricultural Development of China, Chinese Academy of Agricultural Sciences, Huazhong Agricultural University, Hebei Agricultural University, Shenyang Agricultural University, Qinnan county of Guizhou province and Qingdao city and we thank them for all works for us. I also thank Jindun Publishing House and Institute of Pomology, CAAS and Huazhong Agricultural University for the chance suppling of to publish this book for me.

There may be some incorrect and improper conclusions in this book since time and our knowledge being limited. So we welcome all readers to give conductive and improved ideals on this book.

Wang Guoping  
Huazhong Agricultural University  
Wuhan, Hubei

# 目 录 CONTENTS

|                 |                                                                     |      |
|-----------------|---------------------------------------------------------------------|------|
| 第一编 落叶果树病虫害及其防治 | Pests and diseases of deciduous fruit trees and their control ..... | (1)  |
| 第一章 落叶果树病害及其防治  | Diseases of deciduous fruit trees and their control ...             | (1)  |
| 第一节 苹果树病害及其防治   | Diseases of apples and their control .....                          | (1)  |
| 苹果树腐烂病          | Apple canker .....                                                  | (1)  |
| 苹果干腐病           | Apple Botryosphaeria canker .....                                   | (5)  |
| 苹果轮纹病           | Apple ringspot .....                                                | (7)  |
| 苹果干枯病           | Apple Phomopsis canker .....                                        | (9)  |
| 苹果枝溃疡病          | Apple European canker .....                                         | (9)  |
| 苹果枝枯病           | Apple twig blight .....                                             | (10) |
| 苹果炭疽病           | Apple anthracnose .....                                             | (10) |
| 苹果霉心病           | Apple mouldy core .....                                             | (11) |
| 苹果锈病            | Apple rust .....                                                    | (11) |
| 苹果花腐病           | Apple blossom blight .....                                          | (13) |
| 苹果疫腐病           | Apple collar rot .....                                              | (14) |
| 苹果煤污病           | Apple sooty blotch .....                                            | (14) |
| 苹果蝇粪病           | Apple fly speck .....                                               | (14) |
| 苹果褐斑病           | Apple brown spot .....                                              | (15) |
| 苹果褐腐病           | Apple brown rot .....                                               | (16) |
| 苹果斑点落叶病         | Apple early leaf falling .....                                      | (16) |
| 苹果轮斑病           | Apple Alternaria leaf spot .....                                    | (18) |
| 苹果白粉病           | Apple powdery mildew .....                                          | (18) |
| 苹果疱斑病           | Apple blister spot .....                                            | (19) |
| 苹果黑点病           | Apple black stain .....                                             | (19) |
| 苹果银叶病           | Apple silver leaf .....                                             | (20) |
| 苹果圆斑根腐病         | Apple Fusarium root rot .....                                       | (20) |
| 苹果黑星病           | Apple scab .....                                                    | (21) |
| 苹果紫纹羽病          | Apple purple root rot .....                                         | (21) |
| 苹果白纹羽病          | Apple white root rot .....                                          | (21) |
| 苹果毛根病           | Apple hairy root .....                                              | (22) |
| 苹果根癌病           | Apple crown gall .....                                              | (22) |
| 苹果红粉病           | Apple pink rot .....                                                | (22) |
| 苹果白绢病           | Apple white silk .....                                              | (23) |
| 苹果青霉病           | Apple blue mold .....                                               | (23) |
| 苹果锈果病           | Apple scar skin .....                                               | (24) |
| 苹果花叶病           | Apple mosaic .....                                                  | (26) |
| 苹果绿皱果病          | Apple green crinkle .....                                           | (28) |

|              |                                           |      |
|--------------|-------------------------------------------|------|
| 苹果褪绿叶斑病      | <i>Apple chlorotic leaf spot</i>          | (29) |
| 苹果茎痘病        | <i>Apple stem pitting</i>                 | (30) |
| 苹果茎沟病        | <i>Apple stem grooving</i>                | (32) |
| 苹果皱叶病        | <i>Apple leaf pucker</i>                  | (33) |
| 苹果小果病        | <i>Apple chat fruit</i>                   | (34) |
| 苹果星裂果病       | <i>Apple star crack</i>                   | (34) |
| 苹果软枝病        | <i>Apple rubbery wood</i>                 | (34) |
| 苹果扁枝病        | <i>Apple flat limb</i>                    | (35) |
| 苹果平枝病        | <i>Apple horixontal branch</i>            | (35) |
| 苹果曲枝病        | <i>Apple twisted limb</i>                 | (35) |
| 苹果枯枝病        | <i>Apple twig blight</i>                  | (36) |
| 苹果枝腐病        | <i>Apple twig rot</i>                     | (36) |
| 苹果丛枝病        | <i>Apple proliferation</i>                | (36) |
| 苹果缩果病        | <i>Apple fruit pucker</i>                 | (37) |
| 苹果小叶病        | <i>Apple little leaf</i>                  | (38) |
| 苹果黄叶病        | <i>Apple yellow leaf</i>                  | (38) |
| 苹果苦痘病        | <i>Apple bitter pit</i>                   | (38) |
| 苹果虎皮病        | <i>Apple scald</i>                        | (39) |
| 苹果水涝烂根病      | <i>Apple water root rot</i>               | (39) |
| 苹果肥害         | <i>Apple fertilizer injury</i>            | (40) |
| 苹果盐碱害        | <i>Apple salt injury</i>                  | (41) |
| 苹果冻害         | <i>Apple freezing injury</i>              | (41) |
| 苹果雹伤         | <i>Apple hail injury</i>                  | (42) |
| 苹果树旱灾        | <i>Apple drought injury</i>               | (42) |
| 苹果日灼症        | <i>Apple sunscald</i>                     | (42) |
| 金冠苹果果锈       | <i>Golden dicidious fruit rust</i>        | (43) |
| 苹果霜环病        | <i>Apple downy ring spot</i>              | (44) |
| 苹果药害         | <i>Apple pesticide injury</i>             | (45) |
| 第二节 梨树病害及其防治 | <i>Diseases of pear and their control</i> | (46) |
| 梨树腐烂病        | <i>Pear Valsa canker</i>                  | (46) |
| 梨干腐病         | <i>Pear Botryosphaeria canker</i>         | (48) |
| 梨干枯病         | <i>Pear Phomopsis twig blight</i>         | (49) |
| 梨轮纹病         | <i>Pear perennial canker</i>              | (50) |
| 梨黑星病         | <i>Pear scab</i>                          | (52) |
| 梨疫腐病         | <i>Pear blight rot</i>                    | (55) |
| 梨锈病          | <i>Pear rust</i>                          | (57) |
| 梨褐腐病         | <i>Pear brown rot</i>                     | (59) |
| 梨黑斑病         | <i>Pear black spot</i>                    | (59) |
| 梨白粉病         | <i>Pear powdery mildew</i>                | (61) |
| 梨褐斑病         | <i>Pear brown spot</i>                    | (62) |

|               |                                               |      |
|---------------|-----------------------------------------------|------|
| 梨圆斑根腐病        | <i>Pear ringspot root rot</i>                 | (62) |
| 梨根朽病          | <i>Pear root decay</i>                        | (63) |
| 梨根癌病          | <i>Pear crown gall</i>                        | (64) |
| 梨毛根病          | <i>Pear hairy root</i>                        | (64) |
| 梨套袋果黑点病       | <i>Pear bagging fruit black spot</i>          | (64) |
| 梨木腐病          | <i>Pear wood rot</i>                          | (65) |
| 梨煤污病          | <i>Pear sooty blotch</i>                      | (66) |
| 梨青霉病          | <i>Pear blue mold</i>                         | (66) |
| 梨灰霉病          | <i>Pear gray mold</i>                         | (66) |
| 梨红粉病          | <i>Pear pink rot</i>                          | (67) |
| 梨黑腐病          | <i>Pear black rot</i>                         | (67) |
| 梨果炭疽病         | <i>Pear anthracnose</i>                       | (67) |
| 梨石痘病          | <i>Pear stony pit</i>                         | (68) |
| 梨干疤病          | <i>Pear dry scald</i>                         | (68) |
| 梨环纹花叶病        | <i>Pear ring pattern mosaic</i>               | (68) |
| 梨脉黄化病         | <i>Pear vein yellow</i>                       | (69) |
| 梨茎沟病          | <i>Pear stem grooving</i>                     | (71) |
| 榲桲矮化病         | <i>Quince stunt</i>                           | (71) |
| 梨实生苗立枯病       | <i>Pear seedling stem rot</i>                 | (72) |
| 梨叶疹病          | <i>Pear leaf spot</i>                         | (72) |
| 梨缩叶病          | <i>Pear leaf curl</i>                         | (73) |
| 梨槲寄生          | <i>Pear Mistletoe parasite</i>                | (73) |
| 梨缺钙症          | <i>Pear calcium deficiency</i>                | (73) |
| 梨黄叶病          | <i>Pear yellow leaf</i>                       | (74) |
| 梨缺硼症          | <i>Pear boron deficiency</i>                  | (75) |
| 梨果柄基腐病        | <i>Pear end rot</i>                           | (75) |
| 梨黑皮病          | <i>Pear black skin</i>                        | (76) |
| 梨幼树冻害         | <i>Pear seedling freezing injury</i>          | (76) |
| 梨果冻害          | <i>Pear fruit freezing injury</i>             | (76) |
| 梨日灼病          | <i>Pear sunscald</i>                          | (77) |
| 梨药害           | <i>Pear pesticide injury</i>                  | (77) |
| 第三节 山楂树病害及其防治 | <i>Diseases of hawthorn and their control</i> | (78) |
| 山楂腐烂病         | <i>Hawthorn Cytospora canker</i>              | (78) |
| 山楂干腐病         | <i>Hawthorn dieback</i>                       | (79) |
| 山楂干枯病         | <i>Hawthorn trunk blotch</i>                  | (80) |
| 山楂枯梢病         | <i>Hawthorn shoot blight</i>                  | (80) |
| 山楂锈病          | <i>Hawthorn rust</i>                          | (81) |
| 山楂花腐病         | <i>Hawthorn blossom blight</i>                | (82) |
| 山楂斑点病         | <i>Hawthorn fleck</i>                         | (82) |
| 山楂斑枯病         | <i>Hawthorn spot blight</i>                   | (82) |

|              |                                            |       |
|--------------|--------------------------------------------|-------|
| 山楂黑星病        | <i>Hawthorn scab</i>                       | (83)  |
| 山楂白粉病        | <i>Hawthorn powdery mildew</i>             | (83)  |
| 山楂果实轮纹病      | <i>Hawthorn fruit perennial canker</i>     | (84)  |
| 山楂青霉病        | <i>Hawthorn blue mold</i>                  | (84)  |
| 山楂根朽病        | <i>Hawthorn root decay</i>                 | (84)  |
| 山楂日灼病        | <i>Hawthorn sunscald</i>                   | (85)  |
| 山楂草甘膦药害      | <i>Hawthorn herbicide injury</i>           | (85)  |
| 第四节 桃树病害及其防治 | <i>Diseases of peach and their control</i> | (86)  |
| 桃树腐烂病        | <i>Peach canker</i>                        | (86)  |
| 桃缩叶病         | <i>Peach leaf curl</i>                     | (87)  |
| 桃细菌性穿孔病      | <i>Peach bacterial shot hole</i>           | (89)  |
| 桃褐斑穿孔病       | <i>Peach brown spot shot hole</i>          | (91)  |
| 桃霉斑穿孔病       | <i>Peach Cerospora shot hole</i>           | (92)  |
| 桃轮斑穿孔病       | <i>Peach Clasterosporium shot hole</i>     | (92)  |
| 桃黑星病         | <i>Peach scab</i>                          | (92)  |
| 桃黑斑病         | <i>Peach black spot</i>                    | (93)  |
| 桃瘿螨畸果病       | <i>Peach mite deformed fruit</i>           | (94)  |
| 桃疫腐病         | <i>Peach collar rot</i>                    | (95)  |
| 桃轮纹病         | <i>Peach black rot canker</i>              | (96)  |
| 桃炭疽病         | <i>Peach anthracnose</i>                   | (96)  |
| 桃褐腐病         | <i>Peach brown rot</i>                     | (97)  |
| 桃软腐病         | <i>Peach soft rot</i>                      | (97)  |
| 桃潜隐花叶病       | <i>Peach latent mosaic</i>                 | (98)  |
| 桃矮缩病         | <i>Peach dwarf</i>                         | (98)  |
| 桃菌核病         | <i>Peach schlerotinia</i>                  | (99)  |
| 桃红粉病         | <i>Peach pink mildew</i>                   | (100) |
| 桃实腐病         | <i>Peach fruit rot</i>                     | (100) |
| 桃红腐病         | <i>Peach pink rot</i>                      | (100) |
| 桃溃疡病         | <i>Peach constriction canker</i>           | (100) |
| 桃白粉病         | <i>Peach powdery mildew</i>                | (101) |
| 桃灰霉病         | <i>Peach gray mold</i>                     | (101) |
| 桃枯梢病         | <i>Peach shoot blight</i>                  | (101) |
| 桃木腐病         | <i>Peach wood rot</i>                      | (102) |
| 桃树根朽病        | <i>Peach root decay</i>                    | (102) |
| 桃根癌病         | <i>Peach crown gall</i>                    | (103) |
| 桃流胶病         | <i>Peach gummosis</i>                      | (103) |
| 桃黄叶病         | <i>Peach yellow leaf</i>                   | (104) |
| 桃红叶病         | <i>Peach red leaf</i>                      | (105) |
| 桃果锈病         | <i>Peach fruit rust</i>                    | (105) |
| 桃裂果病         | <i>Peach fruit split</i>                   | (105) |

|               |                                              |       |
|---------------|----------------------------------------------|-------|
| 桃日灼病          | <i>Peach sunscald</i>                        | (106) |
| 桃树涝害          | <i>Peach water injury</i>                    | (106) |
| 第五节 李树病害及其防治  | <i>Diseases of plum and their control</i>    | (107) |
| 李褐腐病          | <i>Plum brown rot</i>                        | (107) |
| 李红点病          | <i>Plum leaf blister</i>                     | (108) |
| 李细菌性穿孔病       | <i>Plum bacterial shot hole</i>              | (109) |
| 李褐斑穿孔病        | <i>Plum brown spot shot hole</i>             | (110) |
| 李裂皮病          | <i>Plum bark split</i>                       | (110) |
| 李叶斑病          | <i>Plum leaf spot</i>                        | (111) |
| 李衰退病          | <i>Plum decline</i>                          | (111) |
| 李痘病           | <i>Plum pox</i>                              | (112) |
| 李伪痘病          | <i>Plum pseudopox</i>                        | (112) |
| 李流胶病          | <i>Plum gummosis</i>                         | (112) |
| 李果锈病          | <i>Plum fruit rust</i>                       | (113) |
| 李裂果病          | <i>Plum fruit split</i>                      | (114) |
| 李日灼病          | <i>Plum sunscald</i>                         | (114) |
| 第六节 杏树病害及其防治  | <i>Diseases of apricot and their control</i> | (115) |
| 杏疗病           | <i>Apricot pox</i>                           | (115) |
| 杏细菌性穿孔病       | <i>Apricot bacterial shot hole</i>           | (116) |
| 杏菌核病          | <i>Apricot Sclerotinia</i>                   | (116) |
| 杏黑星病          | <i>Apricot scab</i>                          | (117) |
| 杏树干腐病         | <i>Apricot dry rot</i>                       | (118) |
| 杏褐腐病          | <i>Apricot brown rot</i>                     | (118) |
| 杏软腐病          | <i>Apricot soft rot</i>                      | (119) |
| 杏果实斑点病        | <i>Apricot fruit spot</i>                    | (119) |
| 杏银叶病          | <i>Apricot silver leaf</i>                   | (120) |
| 杏褐斑病          | <i>Apricot brown spot</i>                    | (120) |
| 杏叶斑病          | <i>Apricot leaf spot</i>                     | (121) |
| 杏线纹斑病         | <i>Apricot line pattern spot</i>             | (121) |
| 杏褪绿叶斑病        | <i>Apricot chlorotic leaf spot</i>           | (121) |
| 杏红斑果病         | <i>Apricot fruit red spot</i>                | (122) |
| 杏流胶病          | <i>Apricot gummosis</i>                      | (122) |
| 杏果锈病          | <i>Apricot fruit rust</i>                    | (123) |
| 杏干边病          | <i>Apricot edge dry</i>                      | (123) |
| 杏日灼病          | <i>Apricot sunscald</i>                      | (124) |
| 第七节 樱桃树病害及其防治 | <i>Diseases of cherry and their control</i>  | (124) |
| 樱桃穿孔性褐斑病      | <i>Sweet cherry brown shot bole</i>          | (124) |
| 樱桃袋果病         | <i>Sweet cherry pockets</i>                  | (126) |
| 樱桃溃疡病         | <i>Sweet cherry Cytospora canker</i>         | (126) |
| 樱桃花腐病         | <i>Sweet cherry blossom blight</i>           | (127) |

|              |                                                |       |
|--------------|------------------------------------------------|-------|
| 樱桃坏死环斑病      | <i>Sweet cherry necrotic ringspot</i>          | (127) |
| 樱桃矮缩病        | <i>Sweet cherry dwarf</i>                      | (128) |
| 樱桃黄花叶病       | <i>Sweet cherry yellow mosaic</i>              | (129) |
| 樱桃潜花叶病       | <i>Sweet cherry latent mosaic</i>              | (129) |
| 樱桃流胶病        | <i>Sweet cherry gummosis</i>                   | (129) |
| 第八节 枣树病害及其防治 | <i>Diseases of jujube and their control</i>    | (130) |
| 枣疯病          | <i>Jujube witches broom</i>                    | (130) |
| 枣锈病          | <i>Jujube rust</i>                             | (131) |
| 枣褐斑病         | <i>Jujube brown spot</i>                       | (132) |
| 枣缩果病         | <i>Jujube fruit crinkle</i>                    | (132) |
| 枣轮纹病         | <i>Jujube perennial canker</i>                 | (133) |
| 枣根结线虫病       | <i>Jujube root knot nematode</i>               | (133) |
| 枣菟丝子         | <i>Jujube dodder</i>                           | (134) |
| 枣果锈病         | <i>Jujube fruit rust</i>                       | (134) |
| 枣裂果          | <i>Jujube fruit split</i>                      | (134) |
| 第九节 葡萄病害及其防治 | <i>Diseases of grapevine and their control</i> | (135) |
| 葡萄黑痘病        | <i>Grapevine bird eye rot</i>                  | (135) |
| 葡萄白腐病        | <i>Grapevine white rot</i>                     | (136) |
| 葡萄炭疽病        | <i>Grapevine anthracnose</i>                   | (137) |
| 葡萄灰霉病        | <i>Grapevine gray mold</i>                     | (138) |
| 葡萄毛毡病        | <i>Grapevine leaf mite</i>                     | (139) |
| 葡萄蔓割病        | <i>Grapevine dead arm</i>                      | (140) |
| 葡萄褐斑病        | <i>Grapevine brown spot</i>                    | (141) |
| 葡萄小褐斑病       | <i>Grapevine Cercospora spot</i>               | (141) |
| 葡萄霜霉病        | <i>Grapevine downy mildew</i>                  | (142) |
| 葡萄房枯病        | <i>Grapevine axle blotch</i>                   | (143) |
| 葡萄穗轴褐枯病      | <i>Grapevine Alternaria leaf spot</i>          | (143) |
| 葡萄白粉病        | <i>Grapevine powdery mildew</i>                | (144) |
| 葡萄褐点病        | <i>Grapevine brown speckle</i>                 | (145) |
| 葡萄根癌病        | <i>Grapevine crown gall</i>                    | (146) |
| 葡萄白纹羽病       | <i>Grapevine white root rot</i>                | (146) |
| 葡萄扇叶病        | <i>Grapevine fanleaf</i>                       | (147) |
| 葡萄卷叶病        | <i>Grapevine leaf roll</i>                     | (149) |
| 葡萄茎痘病        | <i>Grapevine stem pitting</i>                  | (152) |
| 葡萄栓皮病        | <i>Grapevine corky bark</i>                    | (153) |
| 葡萄斑点病        | <i>Grapevine fleck</i>                         | (153) |
| 葡萄黄斑病        | <i>Grapevine yellow spot</i>                   | (154) |
| 葡萄黄叶病        | <i>Grapevine yellow leaf</i>                   | (155) |
| 葡萄日灼病        | <i>Grapevine sunscald</i>                      | (155) |
| 葡萄药害         | <i>Grapevine pesticide injury</i>              | (156) |

## 第十节 猕猴桃病害及其防治 Diseases of Chinese gooseberry and their control

|          |                             |       |
|----------|-----------------------------|-------|
| 猕猴桃疫霉根腐病 | Yangtao Phytothora root rot | (156) |
| 猕猴桃白绢根腐病 | Yangtao white root rot      | (157) |
| 猕猴桃褐色麻斑病 | Yangtao brown speckle       | (157) |
| 猕猴桃褐腐病   | Yangtao crown rot           | (158) |
| 猕猴桃灰斑病   | Yangtao gray spot           | (158) |
| 猕猴桃褐斑病   | Yangtao crown spot          | (158) |
| 猕猴桃灰霉病   | Yangtao gray mold           | (159) |
| 猕猴桃溃疡病   | Yangtao canker              | (159) |
| 猕猴桃菌核病   | Yangtao Schlerotinia        | (160) |
| 猕猴桃果实秃斑病 | Yangtao fruit spot          | (160) |
| 猕猴桃果实软腐病 | Yangtao fruit soft rot      | (160) |
| 猕猴桃日灼病   | Yangtao sunscald            | (160) |
| 猕猴桃裂果病   | Yangtao fruit split         | (161) |

## 第十一节 草莓病害及其防治 Diseases of strawberry and their control

|       |                           |       |
|-------|---------------------------|-------|
| 草莓灰霉病 | Strawberry gray mold      | (161) |
| 草莓白粉病 | Strawberry powdery mildew | (161) |
| 草莓褐斑病 | Strawberry brown spot     | (162) |
| 草莓病毒病 | Strawberry virus diseases | (162) |

## 第十二节 柿树病害及其防治 Diseases of persimmon and their control

|      |                           |       |
|------|---------------------------|-------|
| 柿角斑病 | Persimmon angular spot    | (165) |
| 柿圆斑病 | Persimmon circular spot   | (165) |
| 柿疯病  | Persimmon witches broom   | (166) |
| 柿树冻害 | Persimmon freezing injury | (166) |

## 第十三节 核桃树病害及其防治 Diseases of walnut and their control

|       |                       |       |
|-------|-----------------------|-------|
| 核桃黑斑病 | Walnut black spot     | (167) |
| 核桃炭疽病 | Walnut anthracnose    | (168) |
| 核桃枝枯病 | Walnut twig blight    | (169) |
| 核桃褐斑病 | Walnut brown spot     | (170) |
| 核桃叶斑病 | Walnut leaf spot      | (170) |
| 核桃白粉病 | Walnut powdery mildew | (171) |
| 核桃轮纹病 | Walnut perennial spot | (171) |
| 核桃黄叶病 | Walnut yellow leaf    | (172) |

## 第十四节 栗树病害及其防治 Diseases of chestnut and their control

|          |                          |       |
|----------|--------------------------|-------|
| 栗树干枯病    | Chestnut endothia canker | (172) |
| 栗炭疽病     | Chestnut anthracnose     | (173) |
| 栗种仁斑点病   | Chestnut seed spot       | (174) |
| 附:无花果炭疽病 | Fig anthracnose          | (175) |

## 第二章 落叶果树虫害及其防治 Pests of deciduous fruit trees and their control

|               |                                         |       |
|---------------|-----------------------------------------|-------|
| 第一节 苹果树害虫及其防治 | Pests of apples and their control       | (175) |
| 桃蛀果蛾          | <i>Carposina niponensis</i>             | (175) |
| 苹小食心虫         | <i>Grapholitha inopinata</i>            | (177) |
| 棉褐带卷蛾         | <i>Adoxophyes orana</i>                 | (178) |
| 苹褐卷蛾          | <i>Pandemis heparana</i>                | (179) |
| 黄色卷蛾          | <i>Choristoneura longicellana</i>       | (180) |
| 芽白小卷蛾         | <i>Spilonota lechriaspis</i>            | (181) |
| 黄斑长翅卷蛾        | <i>Acleris fimbriana</i>                | (181) |
| 黑星麦蛾          | <i>Telphusa chlorodermes</i>            | (182) |
| 淡褐巢蛾          | <i>Swammerdamia pyrella</i>             | (182) |
| 苹果巢蛾          | <i>Yponomeuta padella</i>               | (183) |
| 银纹潜蛾          | <i>Lyonetia prunifoliella</i>           | (183) |
| 金纹细蛾          | <i>Lithocolletis ringoniella</i>        | (184) |
| 美国白蛾          | <i>Hyphantria cunea</i>                 | (185) |
| 人纹污灯蛾         | <i>Spilarctia subcarnea</i>             | (186) |
| 金毛虫           | <i>Porthesia simillis</i>               | (187) |
| 古毒蛾           | <i>Orgyia antiqua</i>                   | (188) |
| 角斑古毒蛾         | <i>Orgyia gonostigma</i>                | (189) |
| 折带黄毒蛾         | <i>Euproctis flava</i>                  | (189) |
| 梨剑纹夜蛾         | <i>Acronictia rumicis</i>               | (190) |
| 桃剑纹夜蛾         | <i>Acronictia ineretata</i>             | (191) |
| 白雪灯蛾          | <i>Spilosoma niveus</i>                 | (192) |
| 苹梢鹰夜蛾         | <i>Hypocala subsatura</i>               | (192) |
| 棉铃实夜蛾         | <i>Heliothis armigera</i>               | (193) |
| 舞毒蛾           | <i>Lymantria dispar</i>                 | (193) |
| 毛翅夜蛾          | <i>Lagoptera juno</i>                   | (194) |
| 亚梨威舟蛾         | <i>Wilemanus bidentatus ussuriensis</i> | (195) |
| 四星尺蠖          | <i>Ophthalmodes irrorataria</i>         | (195) |
| 绿尾大蚕蛾         | <i>Actas selene ningpoana</i>           | (196) |
| 大窠蓑蛾          | <i>Clania variegata</i>                 | (197) |
| 玉米螟           | <i>Ostrinia nubilalis</i>               | (198) |
| 小青花金龟         | <i>Oxycetonia jucunda</i>               | (198) |
| 苹毛丽金龟         | <i>Proagopertha lucidula</i>            | (198) |
| 铜绿丽金龟         | <i>Anomala corpulenta</i>               | (198) |
| 蚱蝉            | <i>Cryptotympana atrata</i>             | (199) |
| 顶斑瘤筒天牛        | <i>Linda fraterna</i>                   | (199) |
| 光肩星天牛         | <i>Anoplophora glabripennis</i>         | (200) |
| 星天牛           | <i>Anoplophora chinensis</i>            | (200) |
| 苹果小吉丁         | <i>Agrilus mali</i>                     | (201) |
| 芳香木蠹蛾         | <i>Cossus cossus</i>                    | (202) |

|              |                                     |       |
|--------------|-------------------------------------|-------|
| 柳干蠹蛾         | <i>Holcocerus vicarius</i>          | (202) |
| 苹果透翅蛾        | <i>Conopia hector</i>               | (202) |
| 苹果瘤蚜         | <i>Myzus malisuctus</i>             | (203) |
| 锈线菊蚜         | <i>Aphis citricola</i>              | (204) |
| 苹果绵蚜         | <i>Eriosoma lanigerum</i>           | (205) |
| 苹果叶螨         | <i>Panonychus ulmi</i>              | (205) |
| 山楂叶螨         | <i>Tetranychus viennensis</i>       | (206) |
| 梨冠网蝽         | <i>Stephanitis nashi</i>            | (206) |
| 茶翅蝽          | <i>Halyomorpha halys</i>            | (207) |
| 康氏粉蚧         | <i>Pseudococcus comstocki</i>       | (207) |
| 梨圆蚧          | <i>Diaspidiotus perniciosus</i>     | (208) |
| 朝鲜球坚蚧        | <i>Didesmococcus koreanus</i>       | (208) |
| 日本球坚蚧        | <i>Eulecniium kunoensis</i>         | (208) |
| 小窠蓑蛾         | <i>Clania minuscula</i>             | (208) |
| 旋纹潜叶蛾        | <i>Leucoptera scitella</i>          | (209) |
| 桑褶翅尺蠖        | <i>Zamacra excavata</i>             | (209) |
| 日本大灰象        | <i>Sympiezomias lewisi</i>          | (209) |
| 黄褐天幕毛虫       | <i>Malacosoma neustria testacea</i> | (210) |
| 第二节 梨树害虫及其防治 | Pests of pears and their control    | (210) |
| 梨小食心虫        | <i>Grapholitha molesta</i>          | (210) |
| 梨云翅斑螟        | <i>Nephopteryx pirivorella</i>      | (212) |
| 梨叶斑蛾         | <i>Illiberis pruni</i>              | (212) |
| 苹掌舟蛾         | <i>Phalera flavescens</i>           | (214) |
| 黄褐天幕毛虫       | <i>Malacosoma neustria testacea</i> | (215) |
| 黄刺蛾          | <i>Cnidocampa flavescens</i>        | (216) |
| 褐边绿刺蛾        | <i>Latoia consosia</i>              | (217) |
| 扁刺蛾          | <i>Thosea sinensis</i>              | (217) |
| 双齿绿刺蛾        | <i>Latoia hilarata</i>              | (217) |
| 桑褶翅尺蠖        | <i>Zamacra excavata</i>             | (218) |
| 梨尺蠖          | <i>Yala pyricola</i>                | (218) |
| 中国梨木虱        | <i>Psylla chinensis</i>             | (219) |
| 梨潜皮细蛾        | <i>Acrocercops astaurota</i>        | (220) |
| 梨瘿华蛾         | <i>Sinitinea pyrigalla</i>          | (221) |
| 茶翅蝽          | <i>Halyomorpha halys</i>            | (221) |
| 麻皮蝽          | <i>Erthesina fullo</i>              | (222) |
| 梨冠网蝽         | <i>Stephanitis nashi</i>            | (223) |
| 梨实蜂          | <i>Hoplocampa pyricola</i>          | (223) |
| 梨虎象          | <i>Rhyuchites foveipennis</i>       | (224) |
| 梨茎蜂          | <i>Janus piri</i>                   | (225) |
| 梨二叉蚜         | <i>Toxoptera piricola</i>           | (225) |