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Organic Gardening

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- **Cultivate without chemicals**
- **Use the latest, safest pest control methods**
- **Battle plant diseases effectively**

Ann Whitman

Author, Trees & Shrubs For Dummies

Suzanne DeJohn

**The Editors of the National
Gardening Associaton**



***Organic
Gardening***
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DUMMIES®
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by Ann Whitman, Suzanne DeJohn,
The Editors of the National Gardening Association



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About the Authors

Suzanne DeJohn describes her fascination with all things botanical as encompassing a curiosity about the natural world and a passion for the science that explains what she sees, all wrapped up in an aesthetic sensibility that inspires her to find beauty in the simplest expressions of nature. “As gardeners, we must take our cues from nature and follow the principles that govern healthy ecosystems. It’s the only way we can create an environment that can sustain us now and for generations to come.”

Suzanne has worn a variety of hats in her twelve years with the National Gardening Association, including work in the education, editorial, and IT departments. She coordinated NGA’s online question and answer service for six years and has answered literally thousands of gardening questions. Convinced that gardeners are curious and love to learn, she was inspired to create the *Exploring the Garden* series of in-depth, online courses that teach the principles of botany in the context of the garden. Suzanne also does Web- and print-based graphic design work for NGA, takes photos for the Web sites, and creates illustrations to accompany articles.

Suzanne’s varied background includes a BS in geology from Tufts; university courses in botany, soils, and plant pathology; a stint as a research assistant in plant pathology; and several years as a self-employed artist and graphic designer. She’s worked on a landscape crew, as well as on a dairy farm and an organic vegetable farm, and spent several years as a cook at a natural foods store. The common themes running through these seemingly disparate vocations are plants, beauty, nature, and healthy food. Suzanne strives for balance in her life by combining time spent outdoors in her gardens with time spent at the computer, communicating what she has learned about plants and gardening.

Ann Whitman earned a Bachelor of Science degree in Plant and Soil Science at the University of Vermont. She also completed a Master of Arts degree in Landscape Design from the Conway School of Landscape Design in Massachusetts. Ann is the author of *Trees and Shrubs For Dummies* (Wiley Publishing, Inc.) as well as *How-To Landscaping Basics* and *Water Gardens: Simple Steps to Adding the Beauty of Water to Your Garden*, both published by Time Life. She also contributes to several gardening magazines and Web sites. When she’s not writing, Ann gardens on fertile river-bottom soil in Vermont where the winters are long and the summers are short, but worth it.

The National Gardening Association (NGA) is committed to sustaining and renewing the fundamental links between people, plants, and the earth. Founded in 1972 as “Gardens for All” to spearhead the community garden movement, today’s NGA promotes environmental responsibility, advances multidisciplinary learning and scientific literacy, and creates partnerships that restore and enhance communities.

NGA is best known for its garden-based curricula, educational journals, international initiatives, and several youth garden grant programs. Together these reach more than 300,000 children nationwide each year. NGA’s Web sites, one for home gardeners and another for those who garden with kids, build community and offer a wealth of custom content.

To find out more about the National Gardening Association, write to 1100 Dorset St., South Burlington, VT 05403, or visit its Web site at www.garden.org or www.kidsgardening.com.

Dedication

Suzanne dedicates this book to her husband, Dale Lane. “Your wisdom, integrity, generosity, and love inspire me every day.”

Acknowledgments

Suzanne would like to thank Ann Whitman for her incredible work on the first edition of this book. It was an honor, a pleasure, and a challenge to revise — and attempt to improve upon — a book that was so filled with useful information. A big round of applause goes to Tracy Barr, the project editor whose insights greatly improved the organization, clarity, and usability of the book. I'm in awe of the way she kept everyone and everything organized. Thanks, too, to Kathy Simpson, another editor who helped focus my wandering prose, and technical editor David King for scrutinizing the content. Finally, thank you to the National Gardening Association for the opportunity to write about organic gardening, a subject near and dear to my heart.

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Introduction

This book is for people who want to grow food and maintain their landscape without using synthetic chemical pesticides and fertilizers. Organic gardening is more than just safe food, however, and it's bigger than nontoxic lawns. Organic gardening is also about making conscious decisions and taking responsibility for actions that affect the world outside your back door, past the end of your driveway, and beyond the boundaries of your hometown.

Most people proudly admit to being environmentalists, but not everyone knows how to be a good steward of his or her own yard, let alone the entire planet. This book gets you started on the path to making healthier choices for your own garden and landscape.

About This Book

Organic gardening covers a lot of ground, so to speak — from maintaining a lawn and growing roses to harvesting fresh fruits and vegetables. If you've read this far, you must be curious about how to garden organically in your own yard. This book takes you step by step through building and maintaining healthy soil, encouraging helpful insects and other organisms, choosing problem-free plants, and getting your plants off to the right start. In addition to the basic concepts of organic gardening, it also includes information about how to grow vegetables, herbs, flowers, trees and shrubs, fruits and nuts, roses, and lawns — without harmful pesticides or synthetic chemical fertilizers.

Conventions Used in This Book

When I refer to plant hardiness — a plant's ability to survive the winter extremes — I use the U.S. Department of Agriculture's Plant Hardiness Zone Map, which you can find in Chapter 3. All temperatures are given in degrees Fahrenheit and measurements in feet or inches.

A lowercase *x* in a species name indicates a hybrid cross. *C. x lavellei*, for example, indicates the Lavalley hawthorn, a variety of Hawthorn (*Crataegus* species).

When I refer to a *local extension office*, I'm referring to government- or university-sponsored services that offer helpful information on gardening. Look under "Extension office" or "Cooperative extension service" in the phone book. The name of the extension office may also be preceded by the name of your local land-grant college, such as "Ohio State University."

Following are a few more conventions, designed to help you navigate your way through the content:

- ✓ *Italic* is used for emphasis and to highlight new words or terms that are defined.
- ✓ **Boldfaced** text is used to indicate the action part of numbered steps.
- ✓ `Monofont` is used for Web addresses.

What You're Not to Read

Although we'd like to believe that you want to pore over every word between the two yellow covers, we know that you may be in a hurry or just want the basic information. To help you out, we've made the "skippable" information easy to recognize: It appears in sidebars or is marked by a Technical Stuff icon. While interesting and related to the topic at hand, this information isn't essential for you to know to have success as an organic gardener.

Foolish Assumptions

In writing this book, I made some assumptions about you:

- ✓ You want to create a safe, beautiful, and healthful place for your family to work and play.
- ✓ You want to harvest the freshest, tastiest, and most nutritious fruits and vegetables possible.
- ✓ You care about the environment and are looking for information that helps you care for your landscape in an ecologically sound way.
- ✓ You've heard about organic gardening but you need more specifics and 'perhaps some convincing that it's right for you.

Whether you come to this book in total gardening ignorance or have some experience under your fingernails, you'll find plenty of hands-on, how-to information to make your organic garden and landscape the best ever.

How This Book Is Organized

To make navigating through this book easier, it's divided into parts. Each part contains chapters related to the part's general topic.

Part I: Understanding the Basics of Organic Gardening

If you think you may want to become an organic gardener but aren't sure what that entails, start with Chapter 1. I've provided enough scary statistics there to start you running down the path toward Chapters 2 and 3, which explain the basic concepts of organic gardening, from soil health to planning low-maintenance landscapes.

Part II: Soil and Fertilizers

Healthy plants and gardens start with the soil. Turn to this part to get started on testing soil; making compost; and buying and using natural, organic fertilizers.

Part III: Managing Pests

Turn to this part whenever you spot trouble in paradise and need to know what it is and what to do about it. Here you can find everything you need to know about insects, diseases, animal pests, and weeds, including specific control measures and products.

Part IV: Growing Organically in Your Yard and Garden

The chapters in this part describe how to grow the most popular vegetables, herbs, fruits and nuts, trees and shrubs, roses, flowers, bulbs, and lawns. In each chapter, I offer advice about how to get the best plants, how to plant and maintain them, and where to obtain more information.

Part V: The Part of Tens

Use the handy lists in this part to impress your friends at parties and win them over to an organic lifestyle. I've listed best organic practices and ten ways to have an eco-friendly home and landscape. Go spread the word!

Color photo section

The color photo section near the center of this book shows you some organic gardening techniques you can apply right away. Flip to the photo section for colorful inspiration, examples of organic controls, and details that would be difficult to spot in black-and-white photos.

Icons Used in This Book

This book uses a variety of icons to highlight really neat tips, common pitfalls, and other interesting and helpful information. Here's what they mean:



If I think of something that saves you time or money or that helps you make a better decision, I flag it with this icon. This icon also appears by sources that help you find particular plants, equipment, or help.



This icon alerts you to actions that may be dangerous to you, your plants, or the environment. Proceed with caution!



If it's good for the environment, I've flagged it with this icon. For earth-friendly methods, look here.



This icon flags principles and practices key to organic gardening.



This icon marks more in-depth information for readers who want to dig a little deeper into the subject. If you just want to know the basics, feel free to ignore the info you find here.

Where to Go from Here

This book is designed so that you can jump into any chapter that grabs your attention. New to organic gardening? You probably want to start in Chapter 1. Interested in planting a vegetable garden? Go to Chapter 13. If you don't know where to start, thumb through until something catches your eye, head to the Table of Content for general topics, or go to the index for specific topics.

Part I

Understanding the Basics of Organic Gardening

The 5th Wave

By Rich Tennant



"Organic gardening's become a way of life for us.
I'll tell you more about it once Tom's finished
aerating the soil."

In this part . . .

Not sure what organic gardening is all about? Jump right into this part for an overview of what *organic* means. Chapter 1 introduces the foundations of organic gardening, along with basic techniques you'll use whether you're growing edibles, flowers, or lawn and landscape plants. Chapter 2 describes the benefits of gardening organically, as well as the risks to you and to the environment of using synthetic pesticides. If you need to justify your organic preferences to naysayers, you'll have plenty to say after reading this chapter.

Evaluate your landscape conditions, such as sun exposure and soil moisture, with help from Chapter 3. And if you've ever wondered about microclimates and plant hardiness, this chapter is the place to turn. After gathering this information, you can begin planning your organic oasis; Chapter 3 also explains how to create a landscape map.