GROWING & USING CAPSICUMS & CHILLIES

WRITTEN BY JOHN MASON AND STAFF OF ACS DISTANCE EDUCATION
CONTENTS

Credits .................................................................................................................. 5

CHAPTER 1 HISTORY AND SCIENCE ..................................................................... 6

History of the capsicum .......................................................................................... 8
Taxonomy of the capsicum ...................................................................................... 10

CHAPTER 2 GROWING CAPSICUMS .................................................................... 11

Growing requirements for capsicums ................................................................. 12
Temperature requirements ................................................................................... 12
Light requirements ................................................................................................... 12
Plant spacing requirements .................................................................................... 14
Nutritional requirements ......................................................................................... 14
Cation exchange capacity and nutrients .......................................................... 15
Ph requirements ....................................................................................................... 16
Soil organic matter .................................................................................................. 18
Fertiliser requirements ............................................................................................ 19
Nitrogen ..................................................................................................................... 20
Phosphorus ............................................................................................................... 20
Potassium .................................................................................................................. 20
How much to apply ................................................................................................... 20
Nutritional requirements of capsicums ............................................................... 20
Plant tissue analysis for nutrients ......................................................................... 22
Plant analysis guide for sampling time, plant part and nutrient levels of capsicums .................................................. 23
Soil water .................................................................................................................. 26
Watering capsicums ............................................................................................... 26
Cultural techniques ................................................................................................. 28
Cover crops ............................................................................................................. 28
Crop rotation ............................................................................................................ 28
Companion plants ................................................................................................. 28
The information in this book is derived from a broad cross section of resources (research, reference materials and personal experience) from the authors and editorial assistants in the academic department of ACS Distance Education. It is, to the best of our knowledge, composed as an accurate representation of what is accepted and appropriate information about the subject, at the time of publication.

The authors fully recognise that knowledge is continually changing, and awareness in all areas of study is constantly evolving. As such, we encourage the reader to recognise that nothing they read should ever be considered to be set in stone. They should always strive to broaden their perspective and deepen their understanding of a subject, and before acting upon any information or advice, should always seek to confirm the currency of that information, and the appropriateness to the situation in which they find themselves.

As such, the publisher and author do not accept any liability for actions taken by the reader based upon their reading of this book.
CHAPTER 1 HISTORY AND SCIENCE

We all know capsicums as the vegetable that can be eaten fresh or cooked, or used to add flavour to a huge range of dishes from Asian stir fries to Mediterranean dishes and Mexican chilli beans. Capsicums have a huge range of other uses as well including condiments such as sweet chilli sauce and ornamental uses like bedding plants grown for colourful foliage or fruits. Whilst this book is primarily written as a resource for commercial growers, it is also intended to be of value to home gardeners and enthusiasts who will benefit from its wealth of information.

Capsicums are also known by the common names of ‘pepper’ or ‘chilli’. The capsicum species that we grow most widely around the world is Capsicum annuum. Capsicums belong to the Solanaceae family of plants, as do tomato, eggplant and potato. A very wide variety of weeds and ornamental plants also belong to this family; some are also edible, but many are toxic, if not deadly.

Most capsicum cultivars grow to between 40 and 90 cm tall, though occasionally they can be outside this range. They are actually perennials, and may survive two or more years in mild climates or greenhouses; however, they are more commonly treated as annuals, being grown over the warmer months of the year in temperate and subtropical climates.

Plants grow fast if conditions are good i.e. moist, well-drained, fertile soils, and warm (but not hot) temperatures. Healthy and strongly growing plants can produce ongoing flushes of flowers, followed by rapid development of fruits, for as long as conditions remain good.

*Capsicum annuum* - Bell Pepper fruits are wide, with a bell-like shape, and have a fat, sweet, and ‘not so hot’ flesh.
Chilli Peppers are generally longer and narrower than the sweet or bell peppers; and are hotter tasting.