**Introduction**

The cotton farm can be home to a wide range of weed species. Many of these weeds are native and were present before cotton was first grown in these areas. Many more weed species, however, are introduced and have successfully established in the farming system.

Some of these weeds are of little importance, but most compete with cotton and are routinely controlled on cotton farms. When these weeds are not controlled, they may act as hosts for pests and diseases, may reduce crop yields, may impede irrigation, cultivation and harvesting operations, and may contaminate or discoulour cotton lint.

Commonly, around 60 to 70 different weed species are found in cotton fields, although the weed spectrum may vary from field to field. Over 140 weed species are currently considered to be weeds of significance on cotton farms.

Positive identification and an understanding of the life cycles of these weeds is an important step in their management. Positive identification is especially important when using an integrated weed management system that includes herbicides. It is essential that herbicides are matched to their target species, matching label information on the control of specific species with a clear understanding of the weed spectrum present in a field.

Traditionally, plants are primarily identified from their floral structure. Identification of adult plants is well covered in a host of publications. However, positive identification of weed seedlings is particularly difficult and is not covered in most publications. The Weed Identification and Information Guide has been designed with this difficulty in mind. A range of photographs has been included for all weeds, including pictures of cotyledon and young seedling plants. In addition, descriptions of the plants are given. These descriptions will help clarify any difficulties with identification.

This document is not complete as yet. More weed species will be added to the list as these become available. The guide is also available on the internet at [http://www.cotton.crc.org.au](http://www.cotton.crc.org.au) and may include additional material. Just follow the links through the cotton site to WEEDpak and the Weed Identification and Information Guide.