

# MITREPLAN PROJECT PLANNER

Grow plants from garden cuttings



- An easy-to-follow guide to achieving a perfect result.
- Outlines all the tools you will need for the job.
- Includes a materials checklist.

#### PLEASE NOTE:

Before starting this project or buying any materials, it is worth your time to read all steps thoroughly first to be sure you understand what is required.

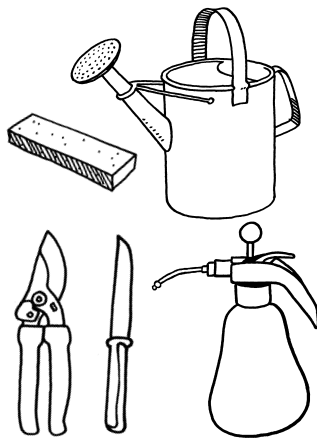
Mitre 10 is proudly Australian owned.

## #52

[mitre10.com.au](http://mitre10.com.au)

**MIGHTY HELPFUL™ MITRE 10**

## MIGHTY TOOLS FOR YOUR MITREPLAN



**Secateurs**

**Propagating knife**

**Sharpening stone (pocket-size)**

**Watering can or bottle sprayer**



The smallest greenhouses often make the best. Just cover the container with a plastic bag and secure. Watch your cuttings grow. Don't forget to check for watering.

## Step 5: Growing climate

The success in striking your cuttings depends on the climate you provide for them. High humidity is needed to prevent the cuttings from losing moisture. Nurserymen call this a microclimate and provide it in glasshouses with misting systems. All that's far too elaborate for the average home gardener, but you can easily improvise. Inverting a glass jar or a plastic drink bottle with the neck cut off is one way. Using a clear plastic bag supported by stakes or wire is another (Fig. 8). Any of these simple home methods creates the humid atmosphere needed by preventing moisture from escaping.

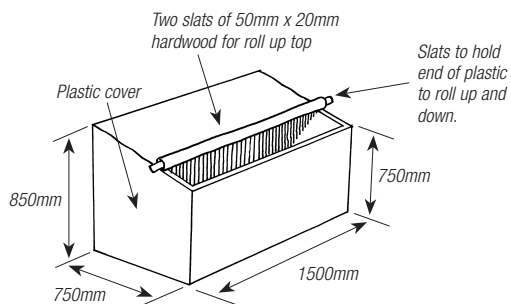
A good size propagation box can be made from heavy duty clear plastic stretched over a frame of 75mm x 50mm treated pine or hardwood (Fig. 9). A box like this can protect your cuttings as well as provide the ideal conditions for those difficult vegetable seeds (Fig. 7).

Light waterings with a small mist sprayer is recommended to create humidity and to keep the propagating mixture moist and cuttings fresh. Good ventilation is also a must in creating the right environment. When the days are warm lift the cover a little to allow the air in, but not so much as to dry out the cuttings. The top of your propagation box should be rolled up a little. Provide shade from direct sunlight as well, or too much heat will build up in the enclosed area causing the cuttings to stress and wilt.

Most cuttings strike best at a temperature between 20-25 degrees celsius, so shade them from the sun with either newspaper, hessian or shade cloth for a week or two. Then harden them up to direct sunlight as root growth begins.

**Fig. 9**

**Propagation box on cold frame.  
Frame of 75 x 50mm treated pine or hardwood**



## How to grow new plants from old – with a little help from Mitre 10.

**There is something fascinating about raising your own plants from cuttings.**

**It can be an interesting hobby in itself, or simply a satisfying way of providing extra plants for your garden and for giving to friends.**

**You don't need to be a master "green thumb" either – there is nothing particularly mysterious about it, nor are any special skills required.**

**Successful propagation essentially depends on knowing the best type of wood to take, having a good root-inducing propagating mixture and providing the right environment while the cuttings strike.**

**This MitrePlan shows you how to do it. Keep it handy and refer to it often as you go about reproducing new plants from your old favourites.**

**You will need:**

- some clean, sharp secateurs to ensure that healthy cuts are made on the cuttings
- propagation mix (available in pre-mix bags)
- rooting powder (helps difficult cuttings to set roots)
- clean & sterilized containers
- labels
- somewhere for the cuttings to grow
- A good idea is a plastic bag to prevent freshly cut plant material from drying out until you have prepared the cuttings.

## Step 1. Collect and prepare your cuttings

Decide which type of cutting you wish to be prepared then collect the plant material early in the morning when it is cool. Spray with a little water to keep them alive until you can prepare the cuttings.

A cutting is simply a piece of a plant such as a leaf, a piece of stem or root which, when planted in the right environment, produces another plant. The main types of cuttings that you can do at home are stem cuttings, and depending on the time of year and the conditions in which you wish to grow them you should use one of the following:

Softwood or tip cuttings are taken early in spring through to summer when the plants are in active growth. The soft fleshy growth of about 50-75mm long is taken from the tip of the stem cutting just below a bud. The leaves are removed from the bottom 1/2 of the cutting (Fig. 1). These cuttings need a lot of tender loving care, such as a small propagation box with a regular misting of water.

Semi-hardwood cuttings are prepared from slightly mature wood, usually around late spring to early autumn. Cuttings look much the same as tip cuttings except the very soft tip is removed (Fig. 3). The leaves are removed from the bottom 1/2 of the cutting leaving 1-3 nodes with leaves (Fig. 4 & 5). This type of cutting seems to be the most successful for the average home gardener.

Hardwood cuttings are usually prepared from the mature wood in late autumn and winter. The mature wood is usually cut into lengths varying from 100mm – 250mm depending on the species. There should be a slight sloping cut at the top just above a bud and a flat cut at the bottom just below a bud. The base is often wounded to help roots to grow (Fig. 2). These cuttings are very easy to grow for most gardeners.

## Step 2: Propagating mixtures

Your growing mixture should be free of weeds and disease; sterile if possible. The mix needs to be porous and drain freely while still holding moisture.

Coarse river sand is useful, but it tends to dry out too quickly.

A better mix is one you make up using:

**3 parts coarse river sand  
1 part peat moss**

Another very good light propagation medium is to mix:

**2 parts Perlite  
2 parts coarse river sand  
1 part peat moss**



**Fig. 1**

Types of cuttings. Different cuttings can be taken from the same plant, tip, semi hardwood and hardwood cuttings.

## Step 3: Cutting containers





Hardwood cuttings of Roses and Hydrangea, notice the wounds cut at the base of the stem to help roots to set.

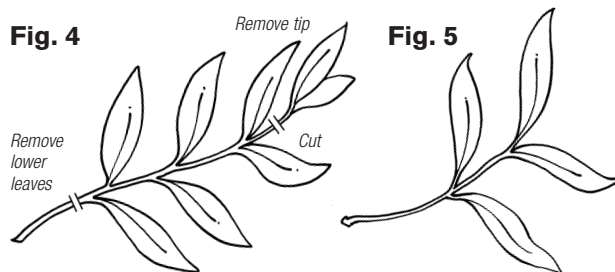


Many plants like this Zygocactus strike so easily, even in the southern states, given a little bit of TLC.



Dip the bottom 15-25mm of the cuttings with a root promoting treatment and then insert the cutting into the media to about 1/3 its depth.

Various brands of propagating mix are also on the market and available through Mitre 10 stores.



#### Preparing semi-hardwood cuttings

The best and easiest to obtain are plastic pots, trays or punnets. Cut down wooden or polystyrene foam fruit and vegetable boxes are also suitable. All are easy to clean, so make sure any container used is washed thoroughly before planting with hot water and detergent or dip in a solution of household bleach or other disinfectant. As with most plants, good drainage is essential. Any containers used should have drainage holes cut or drilled in the bottom.

#### Semi-hardwood cutting

### Step 4: Planting

Cuttings should be planted as soon as possible after taking and dipping the cleanly cut base into a hormone cutting powder or liquid. There are a number of these products available from your Mitre 10 Garden Department and they help cuttings make roots quickly. Place a small quantity of powder or liquid rooting hormone into an old bottle cap and dip the bottom 12-20mm of the cutting into it. Once you have treated all your cuttings discard the remaining powder so as not to contaminate the unused hormone (Fig. 6).

Fill your container with slightly damp propagating mixture to within about 15mm of the top. Plant your cuttings in the container to about one third of their depth into a hole made with a pointed stick or old knitting needle. Space them so that they are not crowded, otherwise rotting will occur. Firm by pressing the mix around them. Water in well and keep the container moist, but not wet. Avoid moving the cuttings too early, and then transfer to individual 7-10cm pots until advanced enough to plant in your garden.



A great addition to a corner of the garden is a simple cold frame. The frame offers great protection for cuttings and seedlings where, the vegetable garden can be grown.

## Some cuttings to try

Plant	Comments
<b>Abelia</b>	Seems to strike best from hardwood cuttings in Winter. Abelia-chinensis, the most popular Abelia strikes readily in the open ground if cuttings taken in July.
<b>Azalea</b> (Evergreen – Indica & Karume)	Both may be taken as tip or semi-hardwood cuttings in Autumn and Summer. Summer is best where new growth from behind or under the flower head will be of suitable length.
<b>Azalea</b> (Deciduous – Mollis & Ghent)	Semi-hardwood cuttings taken in November when side shoots are around 75mm long.
<b>Rhododendrons</b>	Tip or semi-hardwood cuttings from February – July.
<b>Buxus</b> (Box)	Including variegated forms – strike readily from semi-hardwood cuttings taken late Summer to end of July.
<b>Calluna</b> (Heather)	Take semi-hardwood cuttings late Summer through to Autumn.
<b>Camellia</b> (Sasanqua & Japonica)	Both strike reasonably well from tip and semi-hardwood cuttings taken Summer and Autumn.
<b>Carnation</b>	Semi-hardwood cuttings taken in April.
<b>Chrysanthemum</b>	Tip cuttings from new season's growth from the crown early in Spring cuttings 75-100mm long.
<b>Clethera arborea</b> (Lily of the Valley tree)	Strikes well from tip or semi-hardwood cuttings taken during Summer, early Autumn.
<b>Daphne</b>	Best time is when the new growth has just firmed. Both tip and semi-hardwood cuttings do well.
<b>Erica</b>	Most varieties strike well from short side stems with heels taken late Summer, early Autumn.
<b>Gardenia</b>	Strike from tip or semi-hardwood cuttings during Summer or Autumn.
<b>Hydrangea</b>	Hardwood cuttings taken in Winter and early Spring. Cuttings up to 250mm.
<b>Indoor Plants</b>	Many indoor plants strike very easily from firm wood. Remember to keep them warm in Winter months though, for those in the southern states.
<b>Natives</b>	Best time for Native garden shrubs is from February until April – Semi-hardwood cuttings the most successful. Examples include: Grevillea most species Boronias brown and red Tea-Tree all varieties strike well Native Mint all varieties strike well Pittosporum all varieties strike well Correa all varieties strike well
<b>Roses</b>	Best propagated from hardwood cuttings in Winter. Use the prunings from your Winter cutting back!
<b>Weigela</b>	Short 75mm to 150mm hardwood cuttings in early Spring strike easily.



## MIGHTY HELPFUL CHECKLIST

		ORDER
Hormone cutting powder or liquid	<input type="checkbox"/>	
Coarse sand	<input type="checkbox"/>	
Peat moss, vermiculite or Perlite	<input type="checkbox"/>	
Cutting or propagating mix	<input type="checkbox"/>	
Plastic pots, trays, punnets, wooden or styrene boxes	<input type="checkbox"/>	
Clear plastic or glass	<input type="checkbox"/>	
Detergent or disinfectant	<input type="checkbox"/>	
Small stakes	<input type="checkbox"/>	
Wire	<input type="checkbox"/>	
	<input type="checkbox"/>	

**Verbal quotes are indicative only. Written quotes on materials are available upon request from your Mitre 10 store.**

**IMPORTANT:**  
Not all Mitre 10 stores have a garden centre.

Mitre 10 gratefully acknowledges the assistance of

**Mr Robert McMillan, SDH, Cert Public Parks Hort (Scotland), Dip TT, and Mr Ronald Barrow, Dip Hort Sci, Cert Sprinkler Design, DTT, MAIH**

in the preparation of this MitrePlan.

# Grow plants from garden cuttings



**IMPORTANT:** This project planner has been produced to provide basic information and our experienced staff are available to answer any questions you may have. However, this information is provided for use on the understanding that Mitre 10 is not liable for any loss or damage which is suffered or incurred (including but not limited to indirect or consequential loss), for any personal injury or damage to property suffered or sustained as a result of using the information contained in this MitrePlan Project Planner. Mitre 10 advises you to call in a qualified tradesperson, such as an electrician or plumber, where expert services are required, and to independently assess any safety precautions that will need to be followed prior to using the information in this MitrePlan Project Planner.

**WARNING:** There may be by laws or regulations of councils or other statutory bodies that you must comply with when following this MitrePlan Project Planner.

**Your local MITRE 10 Store is:**