

CPC**COOPERATIVE PATENT CLASSIFICATION****A01G****HORTICULTURE; CULTIVATION OF VEGETABLES, FLOWERS, RICE, FRUIT, VINES, HOPS OR SEAWEED; FORESTRY; WATERING**

(picking of fruits, vegetables, hops, or the like [A01D 46/00](#); plant reproduction by tissue culture techniques [A01H 4/00](#); devices for topping or skinning onions or flower bulbs [A23N 15/08](#); propagating unicellular algae [C12N 1/12](#); plant cell culture [C12N 5/00](#))

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

[A01G 33/02](#) covered by [A01G 33/00](#)

A01G 1/00**Horticulture; Cultivation of vegetables (labels or name-plates [G09F 3/00](#), [G09F 7/00](#))**

A01G 1/001

. { Horticultural methods}

A01G 1/002

. {Growing turf}

A01G 1/004

.. { Pre-cultivated sod; Machines for laying it down}

A01G 1/005

.. { Planted mats, e.g. for covering roofs}

A01G 1/007

.. { Flat containers, e.g. for covering roofs}

A01G 2001/008

. {Growing plants or turf in soil-like layered substrates using a foil}

A01G 1/02

. Cultivation of asparagus

A01G 1/04

. Cultivation of mushrooms (composts or fertilisers for cultivating mushrooms [C05](#))

A01G 1/042

.. {Growing rooms with treatment apparatus; Cultivation racks or trays}

A01G 1/044

.. {Apparatus for treating mushroom compost}

A01G 1/046

.. {Cultivation bags or bottles}

A01G 1/048

.. {Mycorrhiza}

A01G 1/06

. Grafting (grafting-wax [A01N 3/04](#))

A01G 2001/065

.. {Removing buds}

A01G 1/08

. Edging for beds, lawns, or the like, e.g. using tiles

A01G 1/12

. Tools for cultivating turf; Sweeping apparatus for lawns; Garden rollers (machines for treating meadows or lawns [A01B 45/00](#); lawn-mowers [A01D 34/00](#))

A01G 1/125

.. {Machines for sweeping lawns and for collecting or disintegrating lawn debris}

A01G 3/00**Cutting implements specially adapted for horticultural purposes; Delimbing standing trees (felling trees [A01G 23/08](#); hand-held cutting tools suitable for other use [B26B](#))**

A01G 3/002

. {for comminuting plant waste (comminuting by cutting implements in general [B02C 18/00](#))}

A01G 2003/005

. {Removing buds}

A01G 2003/007

. {Using spray}

A01G 3/02

. Secateurs; Flower or fruit shears

A01G 3/021

.. { characterized by the arrangement of pivots}

- A01G 2003/023 .. {with means for grasping the cut object}
- A01G 3/025 .. having elongated or extended handles
- A01G 3/0251 ... { Loppers, i.e. branch cutters with two handles ([hedge shears A01G 3/0475](#))}
- A01G 3/0253 { characterized by the arrangement of pivots}
- A01G 3/0255 ... { Tree pruners, i.e. pruning shears carried at the end of a pole}
- A01G 3/0256 { actuated by pulling a rope or the like}
- A01G 3/0258 { actuated by a shaft transmission, e.g. inside the pole}
- A01G 3/033 .. having motor-driven blades
- A01G 3/0335 ... { having elongated or extended handles}
- A01G 3/037 ... the driving means being an electric motor
- A01G 3/04 . Apparatus for trimming hedges, e.g. hedge shears
- A01G 3/0408 .. { specially adapted for trellis work, e.g. machines for pruning vine or the like ([preliminary pruning vines A01G 17/023](#); [defoliating machines A01G 17/026](#))}
- A01G 3/0417 .. { Guiding frames for trimming hedges}
- A01G 3/0426 .. { Machines for pruning vegetation on embankments and road-sides}
- A01G 3/0435 .. { Machines specially adapted for shaping plants, e.g. topiaries}
- A01G 2003/0443 .. {with height-adjustable platforms}
- A01G 2003/0452 .. {with platforms for persons}
- A01G 2003/0461 .. {with reciprocating knives}
- A01G 3/047 .. portable
- A01G 3/0475 ... { Hedge shears}
- A01G 3/053 ... motor-driven
- A01G 3/0535 {with rotatable knives}
- A01G 3/06 . Hand-held edge trimmers or shears for lawns {(with a flexible rotating cutter [A01D 34/416](#))}
- A01G 3/062 .. {Motor-driven edge trimmers}
- A01G 3/065 .. {Hand operated shears for lawns}
- A01G 3/067 .. {Motor-driven shears for lawns}
- A01G 3/08 . Other tools for pruning, branching or delimbing standing trees
- A01G 3/081 .. { Manual cutting tools not otherwise provided for, e.g. pruning hooks}
- A01G 3/083 .. { Manual pruning saws ([saws in general B27B](#))}
- A01G 3/085 .. { Motor-driven saws for pruning or branching ([saws in general B27B](#))}
- A01G 3/086 ... { Chain saws ([chain saws in general B27B 17/00](#))}
- A01G 3/088 ... { Circular saws ([circular saws in general B27B 5/00](#))}

A01G 5/00**Floral handling**

- A01G 2005/005 . {Thorn removers}
- A01G 5/02 . Apparatus for binding bouquets or wreaths
- A01G 5/04 . Mountings for wreaths, or the like; Racks or holders for flowers
- A01G 5/06 . Devices for preserving flowers ([chemical substances A01N 3/02](#); [flower vases A47G 7/06](#))

A01G 7/00**Botany in general** (cultivation without soil [A01G 31/00](#))

A01G 7/02

- Treatment of plants with carbon dioxide (greenhouses therefor [A01G 9/18](#))

A01G 7/04

- Electric or magnetic treatment of plants for promoting growth

A01G 7/045

- {with electric lighting}

A01G 7/06

- Treatment of growing trees or plants, e.g. for preventing decay of wood, for tingeing flowers or wood, for prolonging the life of plants

A01G 9/00**Cultivation of flowers, vegetables or rice in receptacles, forcing-frames, or greenhouses** (cultivation without soil [A01G 31/00](#); {turfing of roofs [E04D 11/002](#)})

A01G 2009/003

- {Plant pots consisting of two halves, allowing easy removal of the plant}

A01G 9/006

- { Labels or label holders for flower pots}

A01G 9/02

- Receptacles, e.g. flower-pots or boxes (hanging flower baskets, holders or containers for flower-pots [A47G 7/00](#)); Glasses for cultivating flowers

A01G 9/021

- {Pots formed in one piece; Materials used therefor}

A01G 9/022

- { Pots for vertical horticulture}

A01G 9/023

- { Multi-tiered planters}

A01G 9/024

- { Hanging flower pots and baskets}

A01G 9/025

- { Containers and elements for greening walls (for covering roofs [A01G 1/007](#))}

A01G 9/026

- {Foldable pots}

A01G 9/027

- {Pots connected in horizontal rows}

A01G 9/028

- {Multi-compartmented pots}

A01G 9/04

- Flower-pot saucers

A01G 9/042

- { Combinations of a saucer and a flower pot attached together}

A01G 9/045

- { Trays for receiving multiple pots}

A01G 9/047

- { Channels or gutters, e.g. for hydroponics}

A01G 9/06

- Devices for cleaning flower-pots

A01G 9/08

- Devices for filling-up flower-pots { or pots for seedlings}; Devices for setting plants { or seeds} in pots

A01G 9/081

- { Devices for filling-up pots}

A01G 9/083

- { Devices for setting plants in pots}

A01G 9/085

- { Devices for setting seeds in pots}

A01G 9/086

- { Devices for repotting}

A01G 9/088

- { Handling or transferring pots}

A01G 9/10

- Pots {(or other receptacles)} for seedlings, { saplings, cuttings or other young plants (foldable pots)}; Soil {(or like)} blocks for seedlings; { Plant substrate bodies}; Means for forming soil-blocks

A01G 9/1006

- { Tools, machines and methods for forming soil blocks or compressed pots, e.g. from peat}

A01G 9/1013

- { soil blocks or compressed pots}

A01G 9/102

- { Planting receptacles specially adapted for remaining in the soil after planting}

A01G 9/1026

- { Seed or shoot receptacles}

A01G 9/1033

- { Sterile receptacles, e.g. for tissue culture}

- A01G 9/104 .. { Units comprising two or more connected receptacles}
- A01G 2009/1046 ... {containing mineral wool}
- A01G 2009/1053 ... {containing superabsorbents}
- A01G 2009/106 ... {containing wood}
- A01G 9/1066 .. { Grids for supporting several receptacles}
- A01G 9/1073 .. { Receptacles specially adapted for air layering}
- A01G 9/108 .. { Handling or transporting of soil blocks or seedlings}
- A01G 9/1086 .. { Composition of plant substrate bodies (plant growth regulators [A01N](#); fertilizers [C05](#); soil conditioning or soil stabilizing materials [C09K 17/00](#))}
- A01G 2009/1093 .. {for dwarf plants}
- A01G 9/12 . Supports for plants; Trellis for strawberries or the like ({trellis-work for vines [A01G 17/06](#)}; stays for trees, props for vines [A01G 17/14](#))
- A01G 9/122 .. {Stakes}
- A01G 9/124 ... {Means for holding stakes upright in, on, or beside pots}
- A01G 9/126 .. {Wirespool supports}
- A01G 9/128 .. {Fixing of plants to supports, e.g. by means of clips}
- A01G 9/14 . Greenhouses (cloches [A01G 13/04](#); {glazing bars, glazing clips therefor [E04D 3/06](#)})
- A01G 9/1407 .. {of flexible synthetic material}
- A01G 9/1415 ... {with double or multiple walls}
- A01G 9/1423 .. {Greenhouse bench structures}
- A01G 9/143 .. {Equipment for handling produce in greenhouses}
- A01G 9/1438 .. { Covering materials therefor; Materials for protective coverings used for soil and plants, e.g. films, canopies, tunnels or cloches}
- A01G 2009/1446 ... {with perforations}
- A01G 2009/1453 ... {containing textile products}
- A01G 2009/1461 ... {containing woven structures}
- A01G 9/1469 .. {with double or multiple walls}
- A01G 9/1476 .. {Greenhouse gutters (gutters in general [E04D 13/064](#))}
- A01G 2009/1484 .. {Glazing apparatus}
- A01G 2009/1492 .. {Cleaning apparatus}
- A01G 9/16 .. Dismountable or portable greenhouses; {Greenhouses with sliding roofs}
- A01G 9/18 . Greenhouses for treating plants with carbon dioxide or the like
- A01G 9/20 . Forcing-frames; Lights
- A01G 9/22 . Shades or blinds for greenhouses, or the like ({canopies [A01G 13/0206](#)})
- A01G 9/222 .. {Lamellar or like blinds (in general [E06B 9/26](#))}
- A01G 9/225 .. {Inflatable structures}
- A01G 9/227 .. {rolled up during non-use (in general [E06B 9/08](#))}
- A01G 9/24 . Devices {or systems} for heating, ventilating, regulating temperature, or watering, in greenhouses, forcing-frames, or the like
- A01G 9/241 .. {Arrangement of opening or closing systems for windows and ventilation panels}
- A01G 9/242 ... {for greenhouses with flexible coverings}

- A01G 9/243 .. {Collecting solar energy (in general [F24J](#))}
- A01G 9/245 .. {Conduits for heating by means of liquids, e.g. used as frame members or for soil heating}
- A01G 9/246 .. {Air-conditioning systems}
- A01G 9/247 .. {Watering arrangements}
- A01G 2009/248 .. {with distillation of water}
- A01G 9/26 .. Electric devices

A01G 11/00 **Sterilising soil by steam** (soil-conditioning or soil-stabilising materials [C09K 17/00](#))

A01G 13/00 **Protecting plants** (apparatus for the destruction of vermin or noxious animals [A01M](#); use of chemical materials therefor, composition of protective materials, e.g. grafting wax, [A01N](#); {coverings around trees forming part of a road [E01C 9/005](#)})

- A01G 2013/002 . {Wind breakers}
- A01G 2013/004 . {Liquid mulch}
- A01G 2013/006 . {with perforations}
- A01G 2013/008 . {using straw}
- A01G 13/02 . Protective coverings for plants; { Coverings for the ground;} Devices for laying-out { or removing} coverings {(covering materials [A01G 9/1438](#))}
- A01G 13/0206 .. { Canopies, i.e. devices providing a roof above the plants}
- A01G 13/0212 ... { for individual plants, e.g. for plants in pots}
- A01G 2013/0218 .. {for removing}
- A01G 13/0225 .. { Wind breakers, i.e. devices providing lateral protection of the plants}
- A01G 13/0231 .. { Tunnels, i.e. protective full coverings for rows of plants (dismountable or portable greenhouses [A01G 9/16](#))}
- A01G 13/0237 .. { Devices for protecting a specific part of a plant, e.g. roots, trunk or fruits}
- A01G 13/0243 .. { Protective shelters for young plants, e.g. tubular sleeves}
- A01G 13/025 .. { Devices for laying-out or removing plant coverings (for ground coverings [A01G 13/0287](#))}
- A01G 13/0256 .. { Ground coverings}
- A01G 13/0262 ... { Mulches, i.e. covering material not-pre-formed in mats or sheets ([A01G 13/0281](#) takes precedence; composition of mulches [C09K 17/52](#))}
- A01G 13/0268 ... { Mats or sheets, e.g. nets or fabrics ([A01G 13/0281](#) takes precedence)}
- A01G 13/0275 { Films}
- A01G 13/0281 ... { Protective ground coverings for individual plants, e.g. for plants in pots (coverings around trees forming part of a road [E01C 9/005](#))}
- A01G 13/0287 ... { Devices for laying-out or removing ground coverings}
- A01G 13/0293 ... { Anchoring means for ground coverings}
- A01G 13/04 .. Cloches { i.e. protective full coverings for individual plants (dismountable or portable greenhouses [A01G 9/16](#); individual canopies [A01G 13/0212](#))}
- A01G 13/043 ... {with flexible coverings}
- A01G 2013/046 ... {foldable}

- A01G 13/06
 - . Devices for generating heat, smoke, or fog in gardens, orchards, or forests, e.g. to prevent damage by frost ([bee-smokers A01K 55/00](#); fumigators for destroying insects [A01M 13/006](#); for destroying rats [A01M 17/004](#)); chemical aspects of generating smoke or mist [C06D 3/00](#); heating devices in general, see the appropriate classes, e.g. [F24](#))
- A01G 13/065
 - .. {Frost protection by generating fog or by spraying}
- A01G 13/08
 - . Mechanical apparatus for circulating the air
- A01G 13/10
 - . Devices for affording protection against animals, birds, or other pests {(protective shelters for young plants [A01G 13/0243](#))} (traps [A01M 23/00](#) {scaring or repelling devices [A01M 29/00](#)}; pesticides [A01N](#))
- A01G 13/105
 - .. {Protective devices against slugs, snails, crawling insects or other climbing animals}
- A01G 15/00**

Devices or methods for influencing weather conditions (dispersing fog in general [E01H 13/00](#))
- A01G 16/00**

Cultivation of rice ([A01G 9/00](#) takes precedence)
- A01G 17/00**

Cultivation of hops, vines, fruit trees, or like trees
- A01G 17/005
 - . {Cultivation methods}
- A01G 17/02
 - . Cultivation of hops or vines
- A01G 17/023
 - .. {Machines for priming and/or preliminary pruning of vines, i.e. removing shoots and/or buds (trimming apparatus for trellis work [A01G 3/0408](#))}
- A01G 17/026
 - .. {Machines for removing leaves of vines}
- A01G 17/04
 - . Supports for hops, vines, or trees
- A01G 17/06
 - .. Trellis-work
- A01G 2017/065
 - ... {Trellis-work for supporting vines having wire-tensioning devices}
- A01G 17/08
 - ... Tools for attaching hops, vines, or boughs to trellis-work; Tying devices
- A01G 17/085
 - {Tying instruments; Espalier machines}
- A01G 17/10
 - .. Holders for boughs or branches
- A01G 17/12
 - .. Tree-bands
- A01G 17/14
 - .. Props; Stays
- A01G 17/16
 - ... Devices for driving-in or pulling-out props
- A01G 17/18
 - . Means for filling-up wounds in trees
- A01G 21/00**

Devices for hanging-up harvested fruit
- A01G 23/00**

Forestry
- A01G 23/003
 - . {Collecting felled trees}
- A01G 23/006
 - .. {Log skidders}
- A01G 23/02
 - . Transplanting, uprooting, felling or delimbing trees ([delimbing standing trees A01G 3/00](#))

NOTE

Tree feeding devices are covered by group [B27B 25/00](#)

- A01G 23/04 .. Transplanting trees; Devices for grasping the root ball, e.g. stump forceps; Wrappings or packages for transporting trees
- A01G 23/043 ... {Transplanting devices for grasping, undercutting or transporting the root ball ([A01G 23/046](#) takes precedence)}
- A01G 23/046 ... {Transplanting devices using elements to be driven into the ground for making a container around the root ball}
- A01G 23/06 .. Uprooting or pulling up trees; Extracting or eliminating stumps
- A01G 23/062 ... {Pulling up trees or stumps}
- A01G 23/065 {in a substantially vertical plane}
- A01G 23/067 ... {by comminuting the tree stumps}
- A01G 23/08 .. Felling trees ([axes B26B 23/00](#); [saws, sawing machines B27B](#))
- A01G 23/081 ... Feller-bunchers, i.e. with bunching by felling head ([A01G 23/083](#) takes precedence)
- A01G 23/083 ... Feller-delimbers
- A01G 23/085 having the shearing head mounted on a first boom and the delimbing head mounted on a second boom
- A01G 23/087 ... Shearing apparatus or the like specially adapted for felling trees ([A01G 23/081](#), [A01G 23/083](#), [A01G 23/093](#) take precedence)
- A01G 23/089 having two or more shears
- A01G 23/09 of the percussion type
- A01G 23/091 ... Sawing apparatus specially adapted for felling trees ([A01G 23/081](#), [A01G 23/083](#), [A01G 23/093](#) take precedence)
- A01G 23/093 ... Combinations of shearing, sawing or milling apparatus specially adapted for felling trees
- A01G 23/095 .. Delimbers ([A01G 23/083](#) takes precedence; manufacture of wood shavings, chips, powder, or the like, per se [B27L 11/00](#))
- A01G 23/0955 ... {Self-propelled along standing trees}
- A01G 23/097 ... having a fixed delimbing head
- A01G 23/099 .. Auxiliary devices, e.g. felling wedges
- A01G 23/10 . Tapping of tree-juices, e.g. caoutchouc, gum
- A01G 23/12 .. Knives or axes for tapping
- A01G 23/14 .. Tapping-spouts; Receptacles for juices
- A01G 25/00** **Watering gardens, fields, sports grounds, or the like** ([special apparatus or adaptations for fertilising-liquids A01C 23/00](#); [nozzles or outlets, spraying apparatus B05B](#); [gravity flow, open channel irrigation ditch systems E02B 13/00](#))
- A01G 2025/003 . {with an impermeable layer in the ground}
- A01G 2025/006 . {Tubular drip irrigation dispensers mounted coaxially within water feeding tubes}
- A01G 25/02 . Watering arrangements located above the soil which make use of perforated pipe-lines or pipe-lines with dispensing fittings, e.g. for drip irrigation ([perforated pipes per se B05B 1/20](#))
- A01G 25/023 .. {Dispensing fittings for drip irrigation, e.g. drippers}

- A01G 25/026 . . {Machines and methods for fixing the drippers in the pipe}
- A01G 25/06 . Watering arrangements making use of perforated pipe-lines located in the soil (perforated pipes per se [B05B 1/20](#); similar arrangements for drainage [E02B 11/00](#))
- A01G 25/09 . Watering arrangements making use of movable installations on wheels or the like
- A01G 25/092 . . {movable around a pivot centre}
- A01G 25/095 . . {winch-driven ([A01G 25/097](#) takes precedence)}
- A01G 25/097 . . {guided or propelled along a water supply line with supply line traversing means}
- A01G 25/14 . Hand watering devices, e.g. watering cans
- A01G 25/145 . . {with pumps}
- A01G 25/16 . Control of watering (controlling of spraying devices [B05B](#))
- A01G 25/162 . . {Sequential operation}
- A01G 25/165 . . {Cyclic operations, timing systems, timing valves, impulse operations}
- A01G 25/167 . . {Control by humidity of the soil itself or of devices simulating soil or of the atmosphere; Soil humidity sensors}

- A01G 27/00** **Self-acting watering devices, e.g. for flower-pots**
- A01G 27/001 . {with intermittent watering means}
- A01G 27/003 . {Controls for self-acting watering devices}
- A01G 27/005 . {Reservoirs connected to flower-pots through conduits}
- A01G 27/006 . {Reservoirs, separate from plant-pots, dispensing directly into rooting medium}
- A01G 27/008 . {Component parts, e.g. dispensing fittings, level indicators}
- A01G 27/02 . having a water reservoir, the main part thereof being located wholly around or directly beside the growth substrate ([A01G 27/06](#) takes precedence)
- A01G 27/04 . using wicks or the like
- A01G 27/06 . . having a water reservoir, the main part thereof being located wholly around or directly beside the growth substrate

- A01G 29/00** **Root feeders; Injecting fertilisers into the roots**

- A01G 31/00** **Hydroponics; Cultivation without soil ([A01G 33/00](#) takes precedence)**
- A01G 31/001 . {Soilless culture substrates}
- A01G 2031/002 . {Substrates with a flexible envelope}
- A01G 2031/003 . {with foam substrates}
- A01G 2031/005 . {with mineral wool substrates}
- A01G 2031/006 . {with means for recycling the nutritive solution}
- A01G 2031/007 . {with superabsorbents}
- A01G 2031/008 . {with wood}
- A01G 31/02 . Special apparatus therefor (apparatus for cultivation in receptacles or greenhouses in general [A01G 9/00](#); self-acting watering devices [A01G 27/00](#))
- A01G 31/04 . . Hydroponic culture on conveyers
- A01G 31/042 . . . {with containers travelling on a conveyor belt or the like}
- A01G 31/045 . . . {with hanging containers travelling along a rail}
- A01G 31/047 . . . {using a rotating drum or the like}

A01G 31/06 . . Hydroponic culture on racks or in stacked containers

A01G 33/00 Cultivation of seaweed {or algae}