

HORTICULTURAL POT

This invention relates to horticultural pots.

The nature of the pot in which they are grown plays an important role in the growth of ornamental plants. Conventional flower pots are not well adapted to drastic changes of weather. Too much rainfall makes the soil muddy, results in poor aeration thereof, and causes root rot. In a dry season, unless frequently watered, even hardy plants may die.

5 The present invention seeks to obviate or mitigate these drawbacks of conventional flower pots.

10 In accordance with the present invention, there is provided a horticultural pot comprising: a lower pot with a drainage hole at its bottom; a hollow drainage hole cover; a bottomless upper pot located coaxially within  
15 said lower pot with the lower part of the said upper pot at a level slightly below the brim of said lower pot; the lower part of said upper pot being externally provided with a plurality of hollow reservoir structures extending radially to the inner wall of said lower pot, said  
20 structures being capable of storing water and being in intercommunication, and each having a hollow column communicating with the hollow interior of said drainage hole cover; said drainage hole cover additionally having a hollow perforated column upstanding from its centre,  
25 the internal space of which column is open to said drainage hole.

Since the reservoirs are located between the outer wall of the upper pot and the inner wall of the lower pot, they significantly reduce the exposed area of soil  
30 in the lower pot. Preferably two hollow C-shaped reservoirs are located inside the upper pot, together defining a ring which is exactly received circumferentially within the upper end of the upper pot. This arrangement

serves further to reduce the exposure of the soil in the pot to the air. The C-shaped reservoirs suitably have a water inlet and bottoms formed of water-pervious material. The hollow columns of the hollow reservoir structures and the hollow drainage hole cover with which they communicate are preferably formed of water-permeable material.

Since the soil is only partially exposed to the air, the area which may be subject to rain-washing is considerably reduced as compared with conventional flower pots, therefore effectively preventing the undesired formation of muddy masses or pellets and enhancing the aeration and porosity of the soil. Since the soil is only partly exposed to the atmosphere, the temperature inside the soil does not rise too high when the pot is exposed in the sunlight in summer. Likewise, the rate of heat loss is reduced in winter to maintain the soil temperature.

The upstanding hollow perforated column at the centre of the drainage hole cover is preferably densely provided with perforations which allow not only the entry of air but also the discharge of any excess water which would otherwise hamper the respiration of the roots.

Other objects and advantages of the present invention will become more apparent to those persons skilled in the arts to which the present invention relates from the following description taken in conjunction with the accompanying drawings, wherein:-

Fig. 1 is a fragmentary exploded perspective view of a third embodiment of pot in accordance with this invention;

Fig. 2 consists of two views, one showing the lower pot partly cut away to show the internal structure, and the other showing the drainage hole cover and related parts in a perspective view; and

Fig. 3 is a vertical sectional view through a pot in accordance with the present invention.

With reference now to the drawings, particularly Fig. 1 thereof, the pot according to this invention mainly comprises an upper pot (12) and a lower pot (11) with a drainage hole (112).

5       The bottomless upper pot (12) is peripherally provided with a plurality of reservoirs (122) which are connected to hollow drainage hole cover (124) through a plurality of hollow columns (122B). The reservoirs (122) are all at the same level, and extend radially to the inside of the brim of lower pot (11). Thus these reservoirs are inscribed in the inner side of the lower pot. The reservoirs (122) intercommunicate by means of water conduits that form a ring surrounding the upper pot, on which ring there is a water inlet (122A) for the introduction of water. The top sides of all the reservoirs (122), while at the same level, define a platform to receive an ornament (14), which thus stands out against the outer wall (121) of the upper pot acting as its background. Water can exude from the reservoirs (122) to  
10       moisten the soil. A densely perforated column (123) with a honeycomb of perforations (123A), rises from the hollow drainage hole cover (124), and its internal space is open to the drainage hole.

      To moisten the soil at the high level, i.e. the upper portion of the upper pot, there are further provided reservoir means comprising two hollow C-shaped reservoirs (15) and (16), both of which, together define a ring surrounding the stem of the plant, the outer diameter of which ring just coincides with the inner diameter of the upper pot (12) so that the former can be snugly received in the latter. Each of the reservoirs (15) and (16) has a water inlet (17).

      In use, the upper pot is mounted onto the lower pot with the drainage hole cover of the former covering the drainage hole of the latter. The space in the flower pot is then charged with culture soil and the plant settled in place. Fertilizer can be incorporated if desired.

While watering the plant, the reservoirs are filled with water. Dilute fertilizer solution can be stored in the reservoir so that a small amount of fertilizer can be washed into the soil at each time of watering. The whole structure may be made of porcelain and the aforesaid water permeability may be provided by un-enameled porcelain portions, for example in the reservoirs (122), the bottom of reservoirs (15), (16) and in columns (122B), through which water is allowed to exude to the outer surface thereof, forming a thin film of water which doesn't flow downward but is retained in place, and can be absorbed by the soil through contact. The absorption is restricted to the surface.

In case the plant needs to be transplanted, it can be removed by means of pushing the drainage hole cover upward so as not to injure its vulnerable root.



### CLAIMS

1. A horticultural pot comprising: a lower pot with a drainage hole at its bottom; a hollow drainage hole cover; a bottomless upper pot located coaxially within said lower pot with the lower part of the said upper pot at a level slightly below the brim of said lower pot; the lower part of said upper pot being externally provided with a plurality of hollow reservoir structures extending radially to the inner wall of said lower pot, said structures being capable of storing water and being in intercommunication, and each having a hollow column communicating with the hollow interior of said drainage hole cover; said drainage hole cover additionally having a hollow perforated column upstanding from its centre, the internal space of which column is open to said drainage hole.
  2. A horticultural pot according to Claim 1, wherein the wall of the perforated column is densely provided with perforations.
  3. A horticultural pot according to Claim 1, wherein the bottoms of said reservoir structures are formed by water-permeable material.
  4. A horticultural pot according to any preceding claim, wherein two hollow C-shaped reservoirs are located inside said upper pot, together defining a ring which is exactly received circumferentially within the upper end of the upper pot; each said C-shaped reservoir having a water inlet, and a bottom formed of water-pervious material.
  5. A horticultural pot, substantially as hereinbefore described with reference to and as shown in the accompanying drawings.
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