

Selecting Sprinklers for Nursery Production

As selection of appropriate sprinkler a crucial part in irrigation system, factors to consider for overhead irrigation are pressure system.

Similarly, flow rate of sprinkler determines the size of block to be irrigated and number of sprinklers to be run simultaneously as pressure and flow rates require to be measured as located as near as possible to the irrigation zone.

Selection requirements

First, irrigation system should be designed by irrigation professionals to ensure required pressure and flow rates are tight and during conditions, a single sprinkler performs better given that wind affects when pressure is at higher rate. Spacing of less than 4 metres and wind breaks reduces wind effect.

Similarly, the unfiltered water blocks sprinklers with small jet sizes and the presence of substances in water limits the chance of sprinkler options to one with few moving parts. Filtration requirement for each sprinkler is obtained from manufacturers, the height and density of mature crops and ceiling height of structures influences type of sprinkler used. Inverted sprinklers located on droppers should be whitened to ensure effective operation.

Additionally, droplet size is influenced by sprinkler design, jet size, flow rate at operating pressure however the sprinkler height should not be intercepted by crop or obstacles hence a requirement to check obstacles that may interfere with supply pipes or sprinkler location. Spacing

should be such that sprinklers can have all options with row guards to regulate water away.

Furthermore, sprinklers should be designed to meet standard requirements knowing the absorption of growing media is important for means of application. Co efficient uniformity and scheduling co efficient are measures of uniformity of irrigation layout hence choose sprinkler that meets all the requirements in the selection.

Finally, a try and error can be set up to determine best sprinkler.