



Downcomer flooding is a function of pressure drop across the active tray area, downcomer geometry, liquid properties i.e. rate, viscosity, surface tension, deaeration of liquid which is dependent on density difference between liquid / vapour.

Possible reasons:

- Downcomer geometry / residence time too small
- Liquid outlet area reduced due to fouling, solids, tools, polymers
- excessive pressure drop across the active tray area
- tray damage