

VU
PAT-ON

ROOT DISTRIBUTION OF GRAPEVINE ROOTSTOCKS UNDER IRRIGATION IN SÃO FRANCISCO VALLEY, BRAZIL

L. H. Basso, J. A. M. e Silva, E. E. G. da Silva, L. C. Grangeiro

Embrapa Semi-Árido C. P. 23 56300-000 Petrolina-PE Brazil,
lhbasso@cpatasa.embrapa.br

The root distribution of table grape rootstocks IAC 313, Salt Creek, Dog Ridge, 1613 Courdec and IAC 572 were evaluated in Petrolina and Juazeiro counties (São Francisco Valley), Brazil. Table grapes are cropped throughout the year due to warm temperatures in that region. From October to March, the normal rainfall is 513 mm but its time distribution is erratic. Therefore, irrigation is required throughout the year to maximize yield. Roots were distributed along 1m depth soil profile, but most of them were concentrated in the upper 0.4m soil. Soils where evaluations were performed presented low pH, high exchangeable aluminum and low organic matter content in deeper layers, as well as low water retention in the entire profile. These conditions contribute for this shallow rooting of rootstocks. Manure application is typical practice in the crop system of that area, and it enhances root density in the upper soil layer.