Chilean Rootstocks.

Phylloxera has never infested Chilean vines, even though it is rampant in Mendoza, only a few dozen miles over the Andes. It's often claimed that the geographical barriers of the mountains, the Atacama Desert and the Pacific Ocean act as unofficial border guards and this is coupled with two year quarantine for imported plant material. Yet none of this stopped the arrival of the European fruit fly in 1978 - and that had an ocean to cross. Other theories have included the prevalence of flood irrigation (disproved by the introduction of drip systems), and local soil types (as the louse is known not to like sandy soils). However, Pedro Izquierdo (viticultural director, Errazuriz) pointed out that Phylloxera is present elsewhere on soils identical to those found in Chile. He reckons that Chile's very low air humidity is the most likely deterrent. The truth is no one really knows and Alexandré Marnier-Lapostolle admitted that Casa Lapostolle is experimenting with rootstocks "just in case." There does not appear to be a national plan in place to deal with Phylloxera should it be discovered, but Izquierdo has mother blocks of rootstocks large enough to replant the entire Errazuriz and Caliterra vineyards within 3 years if need be.

There are other more pressing reasons for learning about rootstocks: nematode resistance is a major concern, especially in the sandy soils of Casablanca. Rootknot nematode (Meloidogyne) is the worst and kills vines early. Surprisingly nematodes as virus vectors are not a concern to Chilean growers who see no problem with virus on their own rooted vines. Results so far suggest Teleki selections, 5C and 5BB and also 1613 are most promising. Other potential benefits include vigour control and earlier ripening, which is of real interest in Chile where hang-time can be anything from 148 to 160 days (compared to 100 usually quoted for most wine areas). Most producers reckon that Casablanca is a little too cool for Cabernet, but Veramonte have their Cabernet on 101-14 for earlier ripening and believe they can produce good fruit here.

It's still very early days for rootstocks in Chile. Errazuriz planted their first grafted vineyards in 1994 and Veramonte started to graft in 1997, while Viña la Rosa plan to start this year. So far, Ed Flaherty (Chief winemaker, Errazuriz) feels there is a loss of quality in the wines, but notes that the grafted plants are still young and rootstock management has not yet been fully mastered in Chile. For instance, own-rooted vines manage water better, while rootstocks require more accuracy in irrigation. However, the more controllable drip irrigation is only installed in around 5% of Chile's vineyards. Other disadvantages include cost (own rooted vines cost about 0.30USD compared to grafted plants at 1.50USD); shorter-lived vines due to weakness at the graft union; and getting hold of the right rootstocks. According to Izquierdo "this is the worst part, misnamed, loaded with viruses, etc." In spite of this he has planted the new super-premium Seña vineyard (the Mondavi joint venture) with Merlot grafted to 1613 and an experimental plot of Cabernet on all the rootstock he could get his hands on.

It looks as though rootstocks do have a role to play in Chilean viticulture, never mind their position as insurance against Phylloxera, though it would be a shame if Chilean growers turned away from their unique viticultural legacy of pre-Phylloxera vines.

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