

## **'BRS Isis': a novel red seedless table grape cultivar tolerance to downy mildew.**

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'BRS Isis' was selected from the cross 'CNPUV 681-29' ['Arkansas 1976' x 'CNPUV 147-3' ('Niagara Branca' x 'Vênus')] x 'BRS Linda'. Three hundred and ninety-nine embryos were rescued from the cross, giving rise to 158 plants, which were grafted in the vineyards of Embrapa Grape and Wine. The original plant was selected due to its high bud fecundity, red large berries and neutral flavor. These traits and also downy mildew [*Plasmopara viticola* (Berk e Curt) Berl] tolerance were confirmed during evaluation essays in tropical and subtropical regions. It is a vigorous late cultivar with strong shoot dominance. Most effective conduction systems are pergola or "Y" systems. Thermal requirements were estimated in 1,675 degree-days from pruning to harvest, and 1,800 degree-days from bud sprouting to the end of maturation. It presents 2-3 great compact clusters per shoot, with natural weight of 375 g, without growth regulators. Innate berries are also large, reaching an average of 18.5 x 28.5 mm. These features make 'BRS Isis' a very productive cultivar. In tropical regions, where two annual production cycles can be made, the average productivity in four successive years, was 26 t/ha/cycle. Besides downy mildew, 'BRS Isis' is also tolerant to leaf blight, but susceptible to leaf rusty (*Phakopsora euvitis* Ono) and to *Botryodiplodia theobromae* Pat. The incidence of bunch rots (*Botrytis cinerea* Pers.), powdery mildew [*Uncinula necator* (Schw.) Burr.] and anthracnosis [*Elsinoe ampelina* (De Bary) Shear] were not observed during the essays. Full mature grapes are neutral flavor with big soft seed rudiments. Soluble solid can reach 16-21°Brix together with low total acidity (0,34-0,55 g of tartaric acid 100 ml-1) and resulting in a SS/AT varying from 38 to 47.

Theme: Plant Breeding

Area: Viticulture