## Soil zoning for wine certification of ride region of the sub-medium São Francisco river, Brazil

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The Agricultural Zoning takes into account the combination of factors such as soil and the socioeconomic environment, in order to organize the rational distribution of economically profitable tillage, the social and cultural characteristics of each region and the basis for territorial of land use. In addition, the edaphic zoning reinforces the potential of soils for economic development of a particular tillage. The physical, chemical and biological characteristics of soils represent, together with the climatic attributes, the main requirements for the establishment of any kind of cultivation. It should take into account the different classes of soil in the region. The edaphic zoning of vine for wine production in the Sub-medium of San Francisco River was developed in environment SIG, by overlaying and processing of soil information. The following towns in Pernambuco State were studied: Petrolina, Lagoa Grande and Santa Maria da Boa Vista. In addition, the towns in Bahia State were studied: Casa Nova, Sobradinho, Juazeiro and Curaçá. The SIG environment considers georeferenced information, allowing integrate various thematic data at different scales, including the smallest scale available. Systematized the soil requirements for the production of each variable of wine grapes were classified into four categories: preferred, recommended, little recommended and not recommended. The definitions for these categories were: preferred, land without significant limitations for sustained tillage production, observing the correct soil management. Recommended, land that have moderate limitations for sustained tillage production. Little recommended, land presenting severe limitations for sustained tillage production, and not recommended, land not suitable for sustained production, because there is at least one edaphic parameter in the "not recommended" class. These categories of soil requirement express the potential of the crop for development, due to the limitations affecting the land.