Identification of cis and trans-resveratrol in tendril and stems of *Vitis vinifera L.*

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The resveratrol (3,5,4'-trihydroxystilbene) is a secondary metabolite synthesized in some plants from p-coumaryl-CoA and three molecules of malonyl-CoA. Its biosynthesis is stimulated by UV radiation and fungi presence. Since it is a polyphenol with antioxidants properties, it has been researched as a potent pharmaceutical compound. Both isomeric forms cis and trans are found in grapefruits but the trans form is converted to the cis form in the presence of light. It was aimed to identify the presence of cis and trans resveratrol in both tendril and stems of *Vitis vinifera L.* by High Efficiency Liquid Chromatography method. The stems and tendril were collected in the city of Cruz das Almas, BA, Brazil. A standard trans-resveratrol with 99.3 % purity was used. The cis form was obtained from the trans form by exposing it to visible light of 60W for 24 hours at 38º C. Mobile phases used were methanol and acetic acid; water and acetic acid. Peaks were detected by diode array detector and 305 nm wavelength. Comparing the data obtained from vegetable samples and the standard compounds it was possible to find only cis-Resveratrol in the stems and tendril. The trans form was not found due to probably be converted to the cis form. In conclusion the method tested was effective to identify the cis form.

Word Keys: HPLC, resveratrol, isomers.