Anti HSV-1 Activity of Five Strawberry Cultivars

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SUMMARY. Five strawberry (*Fragaria x ananassa*) cultivars harvested in Passo Fundo (State of Rio Grande do Sul, Brazil) were quantified for their total flavonoids (TF) and total anthocyanins contents (TA) and the extracts were evaluated for their *in vitro* antiherpes (anti-HSV-1, KOS strain) activity. The cultivars Camarosa and Aromas presented the highest TF (149.1 and 129.4 mg RE/100g FF), respectively; and TA (92.8 and 84.4 mg CGE/100 g FF), respectively. On the other hand, Camino Real cultivar showed the lowest TF (69.9 mg RE/100 g FF) and TA (46.2 mg CGE/100 g FF). With regard to the antiherpes activity, Camarosa and Aromas cultivars also displayed the highest activity detected (IC₅₀ = 1.68 mg/mL and 1.80 mg/mL, respectively) and Camino Real the lowest (IC₅₀ = 2.69 mg/mL). A relationship between the presence of flavonoids and anthocyanins and the detected anti-HSV-1 activity might be suggested for the strawberry cultivars studied.

KEYWORDS: Anthocyanins, Antiviral activity, Flavonoids, HSV-1, Strawberry.

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