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The use of a gold electrode to determine Morin (MO) in the presence of two polyphenolic compounds as Quercetin (Q) and Rutin (RU) by cyclic and adsorptive stripping voltammetry is reported. The effects of various operational parameters such as pH, supporting electrolyte, adsorptive potential and time ($E_{ads}$, $t_{ads}$) were optimized. The optimum experimental conditions chosen were: pH 3.0 (phosphate buffer 0.001 mol L$^{-1}$), $E_{ads}$: $-0.20$ V and $t_{ads}$: 60s. Under these conditions MO was oxidized at $+0.49$ V and the linear calibration curves ranged from 0.5 and 5.6 μmol L$^{-1}$. When cetylpyridinium bromide (CPB) was added to the electrochemical cell, a Morin/CPB aggregate was formed, increasing the peak current of MO for at least 30 % than in the absence of this cationic surfactant, and the detection limit changed from 0.40 to 0.083 μmol L$^{-1}$ with 15.0 mol L$^{-1}$ of CPB. The method was validated determining MO in two water samples spiked with MO, Q and RU and finally, was successfully applied to the determination of MO in tea infusions and chocolate drinks samples.

**Keywords:** Morin; Gold electrode; Adsorptive stripping voltammetry; Tea drink; Chocolate drink.

FULL TEXT

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