抗生素藥物配方與分析之研究

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摘 要

近年來，畜牧水產業等生產趨向企業化經營，故採取大群密集化飼養為必然之發展，隨著飼養密集化之要求，預防與治療的工作相當重要。常用之動物用藥如抗生素及磺胺系列可對畜牧水產業等具有其治療功效，還兼具預防等功能。而 diaveridine 及 sulfadiazine 的應用範圍最廣，可治療土壤絲菌病、沙眼、包含體結膜炎，以及對本類藥物敏感之細菌如沙氏桿菌、革蘭氏陽性及陰性菌等所引起之各種感染。 本研究探討 diaveridine 及 sulfadiazine 之物理化學性質及物理化學安定性與其分析方法，並完成 diaveridine 及 sulfadiazine 二物之生理可接受鹽類之製備。目標亦將對抗氧化劑、界面活性劑及各添加物對 diaveridine 及 sulfadiazine 之安定性及水溶性之影響。最後期望可獲得具水溶性、穩定之 diaveridine 及 sulfadiazine 動物用藥配方，以提供工業上生產，更為往後國內從事動物用藥品之配方研究發展有所貢獻。 另一研究 acetaminophen, aspirinum aluminum, ethoxybenzamide, codeine phosphate, thiamine disulfide, potassium guaiacol sulfonate, caffeine anhydrous, chlorpheniramine maleate 等為市售綜合感冒藥劑中較常見之主要成分，本文中所報導乃利用離子配高效液相層析法同時分析此八種成分，並探討逆離子種類、濃度及 pH 之影響。結果顯示使用 Vercopak C-18 (4.6x250 mm) 層析管，並以含 sodium 1-pentanesulfonate (PICB-5)/sodium 1-heptanesulfonate (PICB-7), pH 為 3.0 之逆離子緩衝劑與甲醇作梯度沖提，流速為 1 毫升/ 分鐘，測定波長設定為 280 nm。此方法分析市售三種感冒劑及一合成混合物（含以上八種成分）可得到相當好的結果。

關鍵詞 : 配方 ; 分析 ; 抗生素

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