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Study on the Analysis of Yuliren by TLC and Electrophoresis

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Yuliren, a commonly used Chinese traditional drug, has a purgative and diuretic activity. Thin-layer chromatographic separation and determination of the main components in Yuliren were carried out. The results showed that amygdalin exists in 10 *Prunus* species of Yuliren and the contents of *Prunus humilis*, *P. dictyoneura*, *P. triloba*, *P. salicina* were over 2. 25%. Prunuside A and prunuside B only exist in seeds of *P. humilis*, *P. dictyoneura*, *P. japonica*, *P. japonica* var. *nakaii* and *P. glandulosa*. This method was simple and effective. The water-soluble seed proteins of 10 *Prunus* species were studied by electrophoresis on SDS-polyacrylamide gel. Their electrophoretograms revealed some relation and differences among them. *P. humilis*, *P. dictyoneura*, *P. japonica*, *P. japonica* var. *nakaii* and *P. glandulosa* showed to be most closely related, while the other species could be distinguished from each other according to the band number and the electrophoretic pattern of water-soluble protein.

Key words Yuliren; *Prunus*; Amygdalin; Prunuside A; Prunuside B; TLC electrophoresis

【文摘013】双波长一元线性回归分光光度法同时测定

复方氨基比林注射液中三组分含量 相秉仁, 张尊建, 戴敬朴等. 药学学报, 1992; 27(2): 130—4

根据一组含有不同比例待测和干扰组分的标准混合液的吸收值, 采用一元线性回归方法, 在选择最佳测定波长对的同时建立标准工作曲线方程, 使其更符合实际样品测定时的情况, 提高了结果的精度和可靠性, 并使计算量和实验工作量得以降低。应用于复方氨基比林注射液中三组分氨基比林、安替比林和巴比妥的同时测定, 其平均回收率分别为99.8%, 100.4%和99.8%, 变异系数分别为0.59, 1.48和1.05, 结果优于卡尔曼滤波

法, 偏最小二乘法和目标因子分析法。

【文摘014】γ变量与生理模型结合预报乙酰普鲁卡因胺在大鼠体内处置动力学 刘晓东, 邓宁, 黄圣凯. 中国药理学报, 1992; 13(2): 97—103

测定了乙酰普鲁卡因胺(NAPA)在大鼠中清除率和组织/血液药物浓度比, NAPA 在大鼠血、肝和肾的清除率分别为13.1, 4.88和8.24 $\text{ml} \cdot \text{kg}^{-1} \cdot \text{min}^{-1}$, 用 γ 变量与生理模型结合预报 NAPA 在大鼠体内处置动力学, iv $40 \text{ mg} \cdot \text{kg}^{-1}$ NAPA 后, 估算血药浓度方程为 $C = 55.06t^{-0.220}\exp(-0.00713t)$ 。用 r^2 值为判别标准, 发现在血、肺、小肠、心、脑和皮肤中预报值与观察值吻合好。

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Studies of Seasonal Variation of Alkaloids Contained in *Ephedra sinica* Herba in Inner Mongolia

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The seasonal variation of 5 active alkaloids, namely: Ephedrine E, Pseudoephedrine PE, Norephedrine NE, Norpseudoephedrine NPE and Methylephedrine ME contained in *Ephedra sinica* Herba were determined by HPLC. All of specimens were collected from 5 fixed observation areas in inner Mongolia where the plants were known to grow plentifully, and which send regular supplies to the factory at present time. In the east inner Mongolia E was predominant in all growing period, and in west, PE and E was nearly parallel or PE higher than that of E. The total alkaloid reaches their maximum in middle July and in September to October. The Authors suggested that the active factors affecting the content were ontogenetic stage, precipitation and relative humidity. The other active factors-geography, climate and degenerate phenomenon were discussed.

Key words HPLC; East inner Mongolia; West inner Mongolia; *Ephedra sinica*; Seasonal variation

【文摘015】泽泻对谷氨酸钠肥胖大鼠的影响 戴

岳, 杭秉善. 中成药, 1992; 14(2): 28-9

幼年大鼠 sc 大剂量谷氨酸钠, 造成大量实验性肥胖, 观察中药泽泻对肥胖大鼠的影响。结果发现注射谷氨酸钠 10 wk 后, 大鼠体重增加, Lee 指数值明显高于对照组, 体内大量脂肪蓄积, 血清甘油三酯含量显著升高; 泽泻降低肥胖大鼠的 Lee 指数, 子宫及睾丸周围脂肪指数及血清甘油三酯含量。提示泽泻可能具有一定的减肥

作用。

【文摘016】气质联用研究麻黄及其炮制品中挥发油

曾 诠, 刘成基, 楼冠峰等. 中国中药杂志, 1992; 17(2): 83-7

对麻黄炮制前后挥发油含量及其油中化学成分的变化进行了研究。结果表明: 低沸点物质增多, 含量也增高; 高沸点物质减少, 含量也降低。以炒黄麻黄变化尤为明显。

结合蛋白和外源性的 CaM 拮抗剂等都会影响到 PDE 测定的准确性。竞争性 ELISA 法的 CaM 定量测定由于是一种免疫测定, 在一定程度上可弥补 PDE 法的上述缺点, 但 ELISA 法本身也有其不足。例如, 待测样品中含有较多杂质时同样对测定有干扰; 此外, 由于 CaM 的低种属特异性和低抗原性, 用 ELISA 法对 CaM 进行定量测定的重复性和敏感性尚不理想, 有待改进。

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Analysis of Calmodulin Antibody by Affinity Chromatography and ELISA

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Two groups of antibodies raised by immunization to natural porcine-brain Calmodulin (CaM) mixed with MethylatedBovine Serum Albumin were eluted from a CaM- Sepharose CL- 4B immunoaffinity chromatography column by EGTA and acidic solution respectively and the assay of their affinity was performed. Our re-consideration comes to an opposite result from the documented conclusion that existence of calcium could increase ELISA sensitivity in CaM quantitative analysis.

Key words Calmodulin; Antibody to Calmodulin; Immunoaffinity chromatography; Competitive ELISA

【文摘017】玉米花粉钙调素及钙调素结合蛋白 张虞安, 胡卓逸. 生物化学与生物物理学报, 1992; 24(1): 83-7

钙调素(CaM)在动植物中参与许多基本的生理过程。研究了玉米花粉 CaM 及 CaM 结合蛋白的分离纯化和性质, 为探讨 CaM 在植物生殖生理方面的作用提供

信息。

【文摘018】炮制及其同义词释义 刘成基, 曾 诠. 中药材, 1992; 15(2): 24-6

古代医药文献中“炮制”的同义词有炮炙、修事、修制等10余种, 本文对炮制及其同义词进行了归纳及释义, 为更好地学习和研究中药炮制提供理论基础。