corresponding extract of the latex of *E. royleana*. Ellagic acid and its 3,3′-dimethyl ether were previously reported in two other *Euphorbia* species (5).

The ether-insoluble fraction of the methanol extract showed a number of ninhydrin-positive spots, suggesting the presence of α-amino acids. It was dissolved in methanol and chromatographed[2]. Elution was carried out with increasing proportions of triethylamine in methanol. The identity of the amino acids was established by paper chromatography using authentic markers according to the method of Hardy *et al.* (10). Among the 18 free amino acids detected in the effluents, seven were identified. These were, in order of abundance, glycine, aspartic acid, methionine, asparagine, glutamic acid, tyrosine, and phenylalanine. The major amino acid composition in the latex of *E. royleana* was similar to that of shilajit.

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[2] Dowex-50-X8.

Failure of Prednisone to Alter Plasma Salicylate Concentrations in Dogs

Keyphrases □ Prednisone—effect on plasma salicylate concentrations, dogs □ Salicylate—plasma concentrations, effect of prednisone, dogs □ Interactions—prednisone and salicylate, dogs

To the Editor:

Drug interactions are important considerations in modern therapy. Among the important drug interactions are those affecting disposition of salicylates. Plasma salicylate concentrations are altered by agents such as ammonium chloride, ascorbic acid (1), aminobenzoic acid (2), and "nonsystemic" antacids (3).

An interaction of corticosteroids and salicylates was reported by Klinenberg and Miller (4). They observed a rise in plasma salicylate concentrations in four patients with rheumatoid arthritis as corticosteroid dosage was tapered and salicylate dosage remained constant. The magnitude of increased salicylate concentration was sufficient in one patient for the development of salicylate intoxication. These authors cited the tapering of corticosteroid as the mechanism responsible for the rise in plasma salicylate. This interaction has important implications, because corticosteroids and salicylates frequently are administered simultaneously in the treatment of diseases other than rheumatoid arthritis such as acute rheumatic fever. Because, to our knowledge, the interaction has not been confirmed, we studied the effect of prednisone treatment on plasma salicylate concentration in dogs.

Six mongrel dogs, 13–20 kg, were administered aspirin tablets orally (900 mg/dose, except Dog 6 which received 600 mg/dose) on an 8 am–2 pm–8 pm–2 am schedule. The dosage schedule resulted in average plasma salicylate concentrations between 10 and 20 mg %. Heparinized blood was drawn from each dog at 1 pm daily to monitor plasma salicylate concentrations. Once salicylate concentrations were stable, 10 mg of prednisone was administered orally once daily at 8 am to each dog for 6 days. The aspirin dosage schedule remained unchanged throughout prednisone administration. Plasma salicylate concentrations were determined by a reported method (5).

The salicylate concentrations on the 3 days prior to prednisone administration and on the last 3 days of prednisone administration were averaged for each dog and analyzed by the Student *t* test (paired comparison). Thus, each dog served as its own control for the comparison of aspirin treatment alone *versus* aspirin plus prednisone treatment.

Table I shows the average plasma salicylate concentrations of each dog before and during prednisone treatment. Prior to prednisone treatment, the mean salicylate concentration was 16.1 mg %. During prednisone therapy, the mean salicylate concentration was 17.3 mg %. Comparison of each dog's average plasma salicylate level before and during prednisone treatment by the paired *t* test showed no significant change ($p > 0.05$).

Table I—Average Plasma Salicylate Concentration (Milligrams Percent)

Dog	Before Prednisone	During Prednisone	Difference
1	19	18	−1
2	15	21	+6
3	17	13	−4
4	14	13	−1
5	18	23	+5
6	14	16	+2
Mean	16.1	17.3	1.2 ± 1.5

The importance of recognizing an interaction between corticosteroids and salicylates is obvious. However, it is unclear from these data that the interaction exists, at least in the dog. Hansten (6) listed this interaction, citing the paper by Klinenberg and Miller (4). Their paper also was cited in a symposium on chronic salicylate therapy, but it was pointed out that their results were unconfirmed (7). Our results, showing that corticosteroids did not lower plasma salicylate concentrations in dogs, suggest the need to examine further the reported interaction between these drugs in humans.

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Spot Tests Used for Systematic Identification of Drugs of Abuse

Keyphrases □ Drugs of abuse—systematic identification using spot tests □ Abuse drugs—systematic identification using spot tests □ Spot tests—systematic identification of drugs of abuse

To the Editor:

A number of the observations reported by Masoud (1) are at variance with long accepted literature results (2–6) and our own observations. Our observations are based on tens of thousands of forensic samples which come into our laboratory each year and which are screened using the spot tests mentioned in Masoud's paper (1).

To ensure that these inconsistencies were not due to small differences in the composition of the spot test reagents commonly used in our laboratory and those of Masoud, we prepared reagents to the specifications of Masoud's paper. The observations reported here are based on these reagents. Samples in the range described by Masoud, *i.e.*, 1–2 mg, were used, and all tests were run in porcelain spot plates. The following serious inconsistencies were encountered.

1. In Table II of Masoud's paper under the caption "Alkaloids that Give Negative Tests with One or More Reagents":

(*a*) The table indicates that heroin and morphine give a positive Mayer, a positive Dragendorff, and a negative Wagner test. It is our observation that both give strong positive reactions with all three of these reagents.

(*b*) The table indicates that lysergide (LSD) gives negative results for all three of the alkaloidal tests. It is our observation that pure lysergide gives strong positives with these reagents. Some illicit samples, where the lysergide concentration is quite low, still give a positive Wagner test. The concentrations encountered in many illicit samples will be below the sensitivity limits of these spot tests.

(*c*) The table indicates negative tests with all three reagents for psilocybin. Our observation is that psilocybin gives a positive Wagner and a negative Mayer test.

2. In Table III, under the caption "Nonalkaloids that Give Positive Alkaloidal Tests with One or More Reagents": The table indicates that procaine and methylphenidate give a negative Mayer and a negative Wagner test. Our observation is that both these compounds give positive tests with both reagents.

3. In the discussion of the Marquis reagent on page 843:

(*a*) The discussion indicates that some nonopiates produce color reactions with the Marquis reagent very similar to those shown by the opiates. Ephedrine sulfate, amphetamine sulfate, methamphetamine hydrochloride, and meperidine are listed as examples. Our observation is that the colors produced by these compounds are not similar to the colors produced by the opiates. In fact, the orange to brown color reaction produced by ephedrine, amphetamine, and methamphetamine with the Marquis reagent is used in our laboratory and in most other crime laboratories as a screening test for these compounds (2–6).

(*b*) The discussion continues that these "false positives" are not documented in "other references known to the author." An extensive compilation of the colors produced with the Marquis reagent, which includes these compounds, is found in "Isolation and Identification of Drugs" (2), cited by Masoud as his Ref. 6. Furthermore, this information is in all modern references on forensic drug analysis (2–6).

4. In the discussion of cobalt thiocyanate on page 843: The author comments on the lack of specificity of this test in the identification of cocaine, due to other compounds giving the characteristic flaky pre-