Serum proteino gram of sheep experimentally intoxicated with seeds of *Crotalaria spectabilis* (Leg. Papilionoidea)

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*Crotalaria* species are widely used as manure to recover impoverished soils in consortium with other cultures increasing remarkably the production. This study aimed to evaluate, by means of sodium dodecyl sulphate-polyacrylamide gel electrophoresis (SDS-PAGE), the serum protein concentrations included acute phase proteins of sheep experimentally infected with seeds of *Crotalaria spectabilis*. Fifteen ovine females, were submitted to 7 days of adaptation before the study; animals were camped in individual cages and fed "coast cross" hay, water *ad libitum* and a corn and soy ration supplied twice/day during 35 days as recommended by the NATIONAL RESEARCH COUNCIL-NRC (2007). Animals were allotted in 3 groups, with 5 animals each, and each group received a different percentage of the seed mixed in the ration:

G1 (0.4% of seed),
G2 (0.6%) and
G3 (1.0%).

Blood samples were obtained as scheduled:
T0 (day before intoxication),
T1 (7 days of study),
T2 (14 days of study),
T3 (21 days of study) and
T4 (28 days of study).

For determination of serum total protein levels (biuret method) and frations (by SDS-PAGE) proteins were identified by use of reference markers with molecular weights 29,000, 45,000, 66,000, 97,400, 116,000 and 205,000 daltons as well purified proteins transferrin, haptoglobin, ceruloplasmin, α1-antitripsin and IgG. Statistical analysis was performed by use of Systat software; means were compared by Tukey test. SDS-PAGE electrophoresis technique allowed the fractioning of 31 proteins. Molecular weights varied from 17,000 to 263,000 in G1,
from 17,000 to 268,000 in G2, and
from 17,000 to 273,000 daltons in G3.

Serum concentration of most important proteins were IgA 121±42 (T0), 66±21 (T1), 60±21 (T2), 59±23 (T3), 73±13 (T4), ceruloplasmin 43±9 (T0), 33±9 (T1), 44±23 (T2), 29±4 (T3), 34±5 (T4), transferrin 506±54 (T0), 479±35 (T1), 494±55 (T2), 480±43 (T3), 485±25 (T4), albumin 3292±459 (T0), 3082±385 (T1), 3982±2386 (T2), 3682±2386 (T3), 3718±2303 (T4), heavy chain IgG 1817±205 (T0), 1670±49 (T1), 1659±84 (T2), 1737±84 (T3), 1671±137 (T4), haptoglobin 17±3 (T0), 21±2 (T1), 20±8 (T2), 21±0.49 (T3), 20±6 (T4), α1-acid glicoprotein 45±21 (T0), 18±6 (T1), 22±9 (T2), 15±2 (T3), 18±5 (T4), low chain IgG 818±104 (T0), 923±86 (T1), 954±149 (T2), 790±51 (T3), 822±122 (T4) mg/dL. In conclusion, since there are no reference values established for cases of intoxication by seeds of *C. spectabilis* in sheep, we hope to colaborate establish those reference values.