**Title :** Ketamine Stun on Cattle

**Date :** 13th September 2016

**Location:** UWI Field Station

**Procedure:** The cow was first restrained via use of a Cattle Stanchion and a Rope Halter. A brief Physical exam of the animal was then performed. Its weight was then determined using a weight tape. We then proceeded to calculate the volume of Xylazine 2% (**0.025mg/kg**) and Ketamine 10% (**0.05 mg/kg**) to be given using the formula:

**V= (Weight x Dose)/Concentration.**

The necessary dose of Tolazoline (100mg/ml) was also calculated using this formula (0.23 – 0.47ml).The desired volume of drug was then collected in to a syringe with an 18G needle. Both drug volumes and calculations were checked confirmed to be correct by supervisors before administration. Both injections were then administered Intramuscularly (IM) at the gluteal muscles (rump) of the cow (0.6ml of Xylazine and 0.25ml ketamine). We then waited 10 minutes for the drugs to take effect. The heart and respiratory rate of the animal was then taken in order to observe the changes caused by the sedation. Another dose was given after 35 minutes.

**Results:**

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| **Time** | **Observations** |
| **Pre-Sedation** | **HR:** 60 beats/min  **RR:** 36 breaths/min (clearly audible)  Animal bright, alert and responsive. |
| **Post Sedation**  **(10min)** | **HR:** 52 beats/min  **RR:** 32 breaths/min (faint)  Animal had slower responses and was much calmer (less reactive to manipulation and did not attempt to kick) |

**Conclusion:** The animal was successfully sedated.