**Drugs Used for Closed Method of Castration (Using Burdizzo) Performed on Bull 163**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| DRUG | DRUG USE | DOSE (mg/kg) | WEIGHT (kg) | CONCENTRATION  (mg/ml) | VOLUME |
| Xylazine | Sedative | 0.05 | 150 | 20 | 0.375 |
| Tolazoline | Reversal drug | 0.1 | 150 | 100 | 0.15 |
| Lidocaine | Local anaesthetic | 0.2 | 150 | 20 | 1.5 |
| Toxic Lidocaine |  | 5 | 150 | 20 | 37.5 |

* Toxic Lidocaine indicates the amount of drug we would have to administer to cause toxicity. This was calculated to ensure that the total lidocaine administered to the bull for the day’s procedures would remain below 37.5ml.

**Drugs Used for Open Method of Castration Performed on Bull 163**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| DRUG | DRUG USE | DOSE (mg/kg) | WEIGHT (kg) | CONCENTRATION (mg/ml) | VOLUME (ml) |
| Xylazine | Sedative | 0.025 | 150 | 20 | 0.2 |
| Tolazoline | Reversal drug | 0.05 | 150 | 100 | 0.08 |
| Lidocaine | Local anaesthetic |  |  |  | 6 |
| Banamine | Pain killer | 2.2 | 150 | 50 | 6.6 |
| Pen-Strep | Antibiotic |  |  |  | 22.5 |

* 2ml of Lidocaine was injected into each spermatic chord and 1 ml into each scrotum; making it a total of 6ml administered.
* The concentration of Penstrep was 200,000 IU and the dose was 30,000 IU; therefore the volume to be administered was calculated as 22.5ml

The following lists withdrawal periods of drugs administered to cattle (beef) used for human consumption.

Xylazine – 2 days

Tolazoline – 30 days

Lidocaine – 1 day

Banamine – 4 days

Pen-Strep – 30 days

Withdrawal periods for the following drugs in dairy cattle are:

* Lidocaine is 3 days
* Tolazoline is 2 days
* Xylazine is 24 hours