

Experimental record

E. ulmoides dose

Pharmacopoeia (2020) dosage: 6 ~ 10 g

```
library(dplyr)

group <- c("control", "model", "raw.eu", "pro.eu", "positive", "extra")

dose.meta <- data.table::data.table(No. = 1:length(group)) %>%
  dplyr::mutate(group = group,
                drug = c("-", "-", "raw.eu", "pro.eu", "pos.drug", "MTA"),
                n = 15,
                low = ifelse(grepl("eu", drug), "5", "-"),
                medium = ifelse(grepl("eu", drug), "10", "-"),
                high = ifelse(grepl("eu", drug), "20", "-")) %>%
  dplyr::as_tibble()
knitr::kable(dose.meta)
```

No.	group	drug	n	low	medium	high
1	control	-	15	-	-	-
2	model	-	15	-	-	-
3	raw.eu	raw.eu	15	5	10	20
4	pro.eu	pro.eu	15	5	10	20
5	positive	pos.drug	15	-	-	-
6	extra	MTA	15	-	-	-

Known Variables

$$\begin{aligned}D_{base} &= 15 \text{ (g)} \\w_{rat.weight} &= 400 \text{ (g)} \\w_{hum.weight} &= 60,000 \text{ (g)} \\C_{coefficient} &= 6 \\T_{times} &= 28 \text{ (day)} \\n_{group.rat.number} &= 15 \\M_{group.h.m.l} &= 2 \times (5 + 10 + 20) \\&= 70 \text{ (multiple)}\end{aligned}$$

Require *E. ulmoides* (W_{eu}):

$$\begin{aligned}W_{eu} &= D \times \frac{w_{rat.}}{w_{hum.}} \times C \times T \times n \times M \\&= 17640 \text{ (g)} \\&= 17.640 \text{ (kg)}\end{aligned}$$

E. ulmoides processing and extracting

Raw.eu

- 10 kg *E. ulmoides*
- ...

Pro.eu

- 10 kg *E. ulmodes*
- 40 g of salt per 1 kg (2% salt)
- Salt is dissolved in water in a ratio of 1:20 (40 g dissolve in 800 ml water)
- Stir-fry over moderate fire, until shreds are broken and the surface is charred black

Extract

- Solvent: 70% Ethanol.
- Ratio: *E. ulmodes* extract with 1:10 solvent.

```
df <- data.table::data.table(  
  reagent = c("salt (g)",  
              "95% Ethanol (L)"),  
  amount = c(400, "NA")  
)  
df <- dplyr::as_tibble(df)  
knitr::kable(df)
```

reagent	amount
salt (g)	400
95% Ethanol (L)	NA