# Blood meal analysis by reverse line blot (RLB)

By

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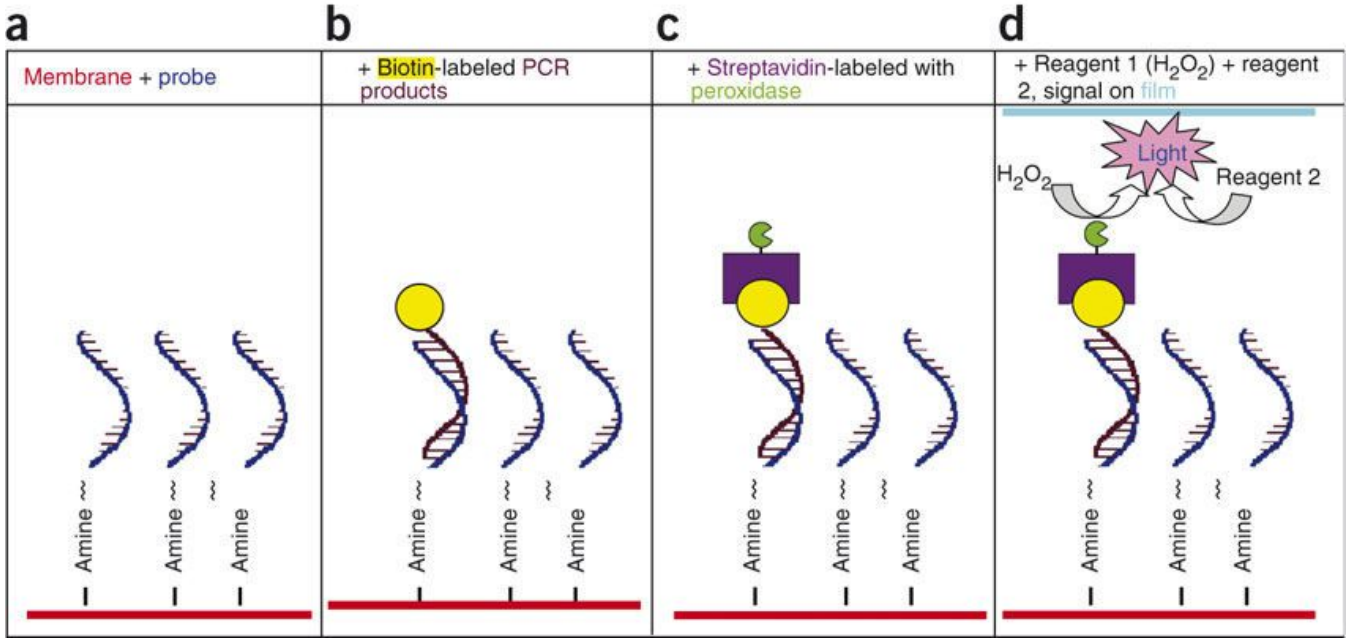
# Rational 1/1

- Analysis of cytochrom transcript allowes discrimination between mammalian blood meal origin

# Protocol 1/1

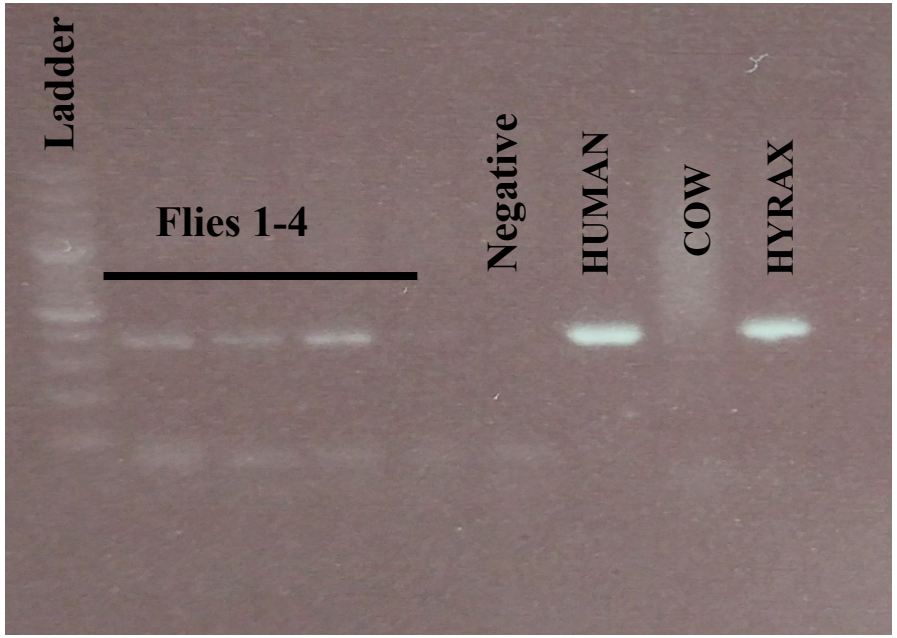
- ✓Selected 4 flies for analysis
- ✓Produced DNA from each fly
- ✓PCR amplification of cytochrome gene
- ✓RLBtim



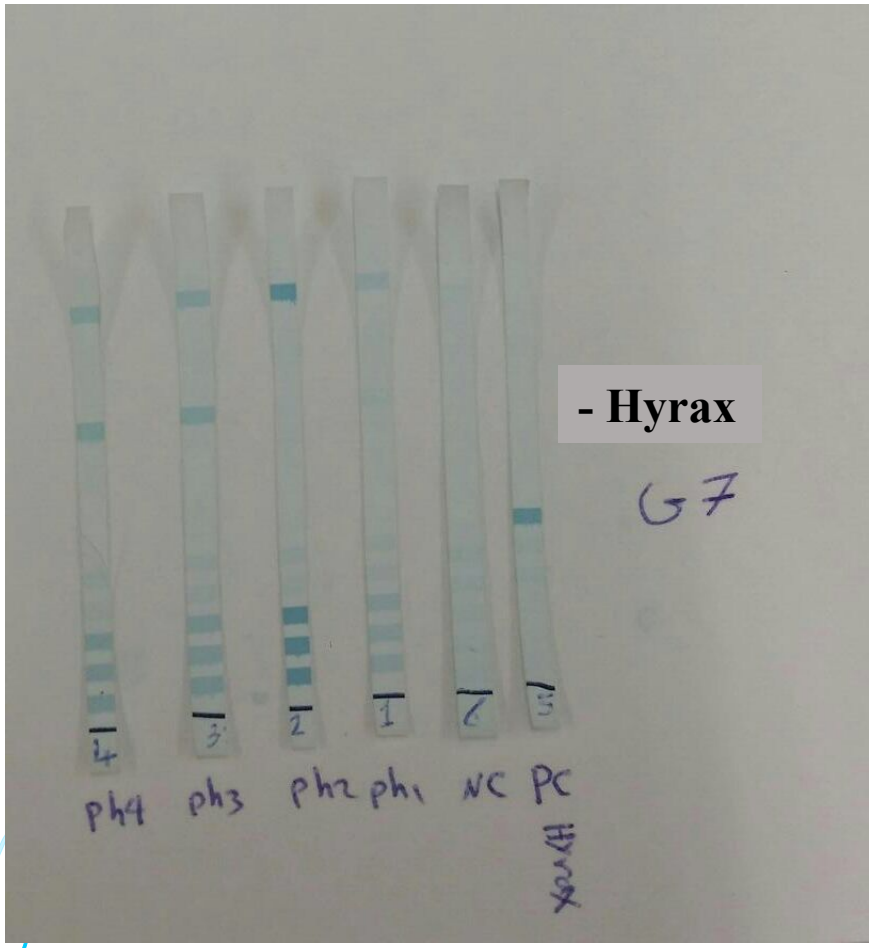
# Results 1/2

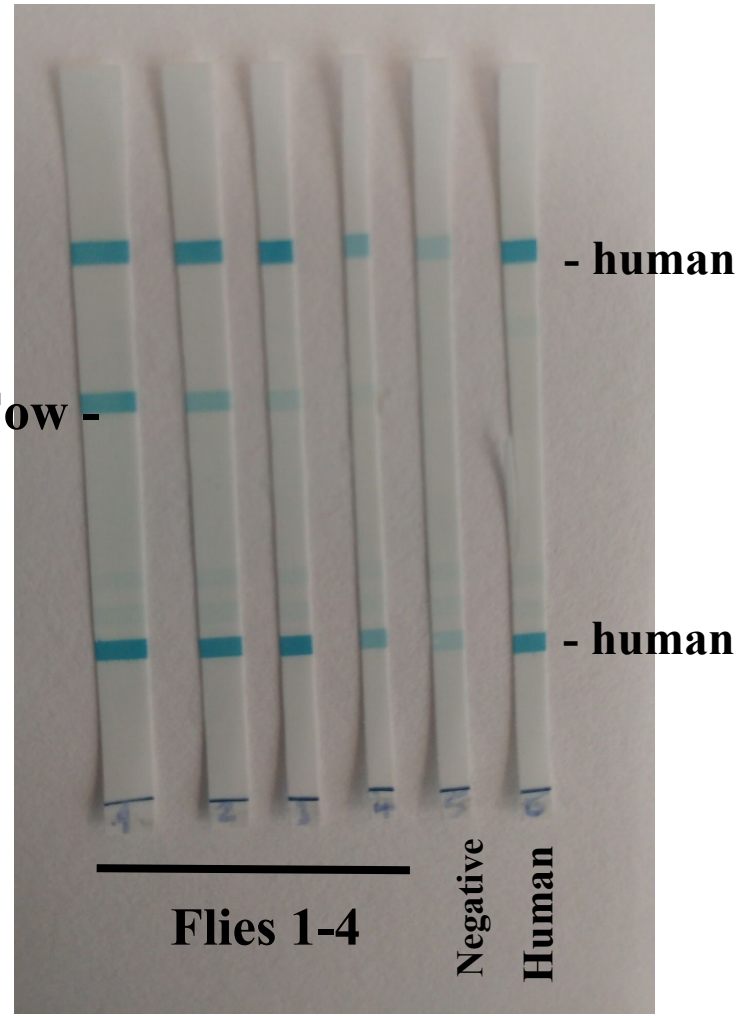
- PCR amplification

✓3 out of the 4 flies- positive



# Results 2/2


- Hyrax
G7
ph4
ph3
ph2
ph1
NC
PC
Hyrax


- human
Cow -
- human
Flies 1-4
Negative
Human

# Discussion 1/2

## ➢Advantages:

- ➢ Test many species on same strip
- ➢ Sensitive
- ➢ Detection of multiple blood meal

## ➢Disadvantages:

- ➢ Not quantative
- ➢ Complicated
- ➢ Unknown host (positive PCR, negative RLB)

# Discussion 1/2

## Challenging questions

- ✓**What can we do when we cant PCR?**
  - ✓Try new gene/ primers
  - ✓Restriction analysis
- ✓**Quantative blood meal analysis**
  - ✓qPCR
  - ✓Deep sequencing
- ✓**Drug testing**
  - ✓Drug testing in malaria
  - ✓Drug testing in trypanosome

# Thank you!!!!