STUDY OF FRESHWATER STREAM ECOSYSTEM

Effects of water flow on biodiversity

5D group 3

EQUIPMENT AND TOOLS🔍

- Light meter x1
- Water flow meter x1
- Quadrat x1
- Measuring tape x1

AIM AND PURPOSE 💡

- To study how the different water flow rate affects animals distribution

CONTROLLED VARIABLES ⚖️

- Water depth :
  a measuring tape is used to measure the depth of the freshwater stream, find similar sites for investigation
- Light intensity :
  a light meter is used to measure the light intensity of the freshwater stream, find similar sites for investigation

INDEPENDENT VARIABLE 🔪

- Water current :
  a water flow meter is used. Put it into the freshwater stream. Do it four times, record the readings and take the average.

DEPENDENT VARIABLES

- Abundance of animals :
  A quadrat is used. Place it into the designated locations to restrict the area for investigation. Take photos and count the number of animals observed inside the quadrat.

- Animal species :
  Record the number of different animal species with different symbols.

Site 1😍😍😍

Photos of site 2, 3 and 4

海南蜷螺 Large Stream Snail

Brotia hainanensis

麥氏擬腹吸鰍 Sucker-belly Loach

Pseudogastromyzon myersi

異鱲 (成魚) Predaceous Chub (Adult

Parazacco spilurus

Sucker belly loach🐟🐟

Water skater

RESULTS🚀

	Site 1	Site 2	Site 3	Site 4
Water current	0.00 m/s	0.28 m/s	0.75 m/s	1.27 m/s
Predaceous chub	16	7	2	0
Large stream snail	17	9	5	0
Biting midges	6	0	0	0
Sucker belly loach	3	0	0	0
Water skater	11	3	0	0
Total number	53	19	7	0
Species	5	3	2	0

CONCLUSION

- The lower the water flow rate, the higher biodiversity, that is abundance of animal and number of animal species.

THANK YOU 💛

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