

## ABSTRAK

**WIDYAWATI TIURMAIDA. Pengembangan Video Ekosistem Mangrove Muara Sungai Dua Dan Yagasu Deliserdang Sebagai Bahan pembelajaran Biologi SMA. Program Pascasarjana Universitas Negeri Medan 2013.**

Penelitian ini bertujuan untuk mengetahui keanekaragaman tumbuhan mangrove dan kepiting *Uca spp*, faktor fisika – kimi ekosistem mangrove dan untuk mengetahui persepsi guru dan siswa terhadap produk video pembelajaran ekosistem mangrove muara dua dan Yagasu (yayasan gajah Sumatera) Deliserdang Sumatera Utara. Keanekaragaman tumbuhan mangrove dan kepiting *Uca spp* diperoleh dengan melakukan penelitian ekologi ekosistem mangrove, keanekaragaman Kepiting *Uca spp* dan faktor fisika-kimia ekosistem mangrove serta pengembangan media (Pembuatan video dan produksi video). Hasil penelitian menunjukkan keanekaragaman tumbuhan mangrove yaitu *Avicennia marina*, *Bruguiera sexangula*, *Exoceria agallocha* dan *Avicennia alba*. Keanekaragaman Kepiting *Uca spp* yaitu *Uca anunulipes*, *Uca urvillei*, *Uca tetragonon*, *Uca dussumieri*, *Uca vocans*. Suhu udara di ekosistem mangrove berada pada kisaran  $26^{\circ}\text{C}$  –  $28^{\circ}\text{C}$ , suhu tanah  $27^{\circ}\text{C}$  –  $28^{\circ}\text{C}$ , pH tanah 6.2- 6.8, kelembapan tanah 2,3% - 2,5% dan kelembapan udara 70%. Persepsi uji coba video pada siswa SMA Kelas XI dinyatakan baik/layak.

Kata Kunci : Video pembelajaran ekosistem mangrove. Kepiting *Uca spp*, Persepsi guru biologi SMA, persepsi siswa SMA, Muara Sungai Dua, Yagasu Deliserdang Sumatera Utara.



## ABSTRACT

**WIDYAWATI TIURMAIDA.** Development of Ecosystem video Mangrove Sungai Dua Estuary and Yagasu Deliserdang as Learning materials biology High School. State University of Medan Graduate Program 2013.

This research aims to determine the diversity of mangrove plants and *Uca spp crab*, physics-chemical factors of mangrove ecosystems and to determine the perception of teachers and students towards learning video products of Sungai Dua estuary and Yagasu (Foundation of Sumatran elephants) Deliserdang North Sumatra mangrove ecosystem. Diversity of mangrove and *Uca spp crab* obtained by mangrove ecological research and recorded on video, including mangrove plant diversity, diversity of *Uca spp crab* and Physical-chemical factors of mangrove ecosystems and the development of media (Video creation and video Production). Results showed that diversity of mangrove consist of *Avicennia marina*, *Bruguiera sexangula*, *Exoceria agallocha* and *avicennia Alba*. Diversity of *Uca spp crab* is *Uca anunulipes*, *Uca Urvillei*, *Uca Tetragonon*, *Uca dussumieri*, and *Uca vocans*. The air temperature in the mangrove ecosystem in the range of 26<sup>0</sup>C – 28<sup>0</sup>C, soil temperature 27<sup>0</sup>C – 28<sup>0</sup>C, soil pH 6.2- 6.8, soil Moisture 2,3% - 2,5% and 70% humidity. Perception test video at high school students of class XI declared good/ decent.

Key word : Learning Video of mangrove ecosystem. *Uca spp Crab*, high School Biology teacher perceptions, perceptions of high school, Sungai Dua Estuary, Yagasu Deliserdang Northern Sumatra.