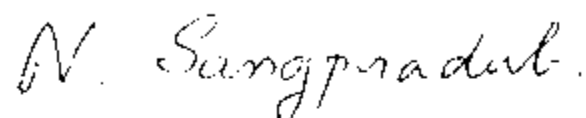


Thesis Title: Species Diversity of Caddisflies (Trichoptera: Hydropsychidae) in  
Promlaeng and Yakruea Streams, Nam Nao National Park, Thailand.

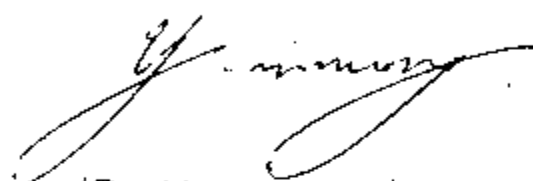
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#### ABSTRACT

Hydropsychid adults were collected monthly by black light traps in Promlaeng and Yakruea streams within Nam Nao National Park from July 1996 to September 1997. Thirteen species of caddis adults were found in Promlaeng stream. They were comprised of *Amphipsyche* sp.1, *Cheumatopsyche charites*, *C. copia*, *C. globosa*, *C. chrysothemis*, *Pseudoleptonema supalak*, *Hydromanicus chattrakan*, *H. serubabel*, *Diplectrona* sp.1, *Macrostemum floridum*, *M. fenestratum*, *Hydropsyche* (*Ceratopsyche*) sp.1 and *Hydropsyche* (*Ceratopsyche*) sp.2. The first eleven species except *Amphipsyche* sp.1 and *H. chattrakan* plus *M. dohrni*, *M. midas* and *Hydatomanicus klanklini* were found in Yakruea stream.

Nine species of hydropsychid larvae inhabited in Promlaeng stream. They were consisted of *Hydropsyche* (*Ceratopsyche*) sp.1, *Hydropsyche* (*Ceratopsyche*) sp.2, *Hydropsyche doctersi*, *Cheumatopsyche* spp., *Diplectrona* sp.1, *H. klanklini*, *M. fenestratum*, *Oestropsyche* sp.1 and *P. supalak*. Exclude *H. doctersi* and *Oestropsyche* sp.1, the other seven species were found in Yakruea stream. *P. supalak* was a

dominant species in Promlaeng while *Cheumatopsyche* larvae were the most abundance in Yakrua.

Substrate types and water velocity were important factors on distribution and abundance of hydropsychids larvae. Flooding was a factor control population of *Cheumatopsyche*, *Hydropsyche* and *Macrostemum*. Dryness was a factor control population of *P. supalak*.

Life history studies of six species were investigated based on extensive field sampling. *Diplectrona* sp.1 and *Hydropsyche* (*Ceratopsyche*) sp.2 were univoltine. *H. klanklini* had a tendency to be univoltine, but *M. fenestratum*, *Hydropsyche* (*Ceratopsyche*) sp.1 and *P. supalak* had a non-seasonal pattern.