



## Plant and fossil plant conservation: a novel protection strategy in Tak province, Thailand, toward UNESCO Global Geopark

Nareerat Boonchai<sup>1</sup>, Pratueng Jintasakul<sup>2</sup>, & Amonruta Boonserm<sup>3</sup>

<sup>1</sup> Maharakham University, Palaeontological Research and Education Centre Kham Riang Subdistrict, Kantarawichai District, Maharakham Province, 44150

<sup>2</sup> Nakhon Ratchasima Rajabhat University, Nai Mueang Subdistrict, Mueang Nakhon Ratchasima 30000

<sup>3</sup> Forest, Natural, and Environmental Resources Conservation Network of Tak-Ok sub-district, Tak-Ok Subdistrict, Bantak District, Tak Province 63120 Thailand

Thailand's natural resources are under threat and there have been many strategies used to mitigate their loss. Different management strategies include establishing National Parks, Forest Parks, World Heritage, Man and Biosphere Reserve, have been implemented with various levels of success. The Global Geopark Network (GGN) was founded in 2004 as a holistic conservation program and ratified as UNESCO Global Geopark in 2015, but is lesser known in Thailand than other UNESCO programs. Bantak district, Tak Province, possesses distinguished plant community, e.g., cycads and large petrified trees (up to 69 meters tall), one of the nearest living relatives is *Koompassia* (Leguminosae). For over a decade, the government has listed the area as Forest Park for fossil, plant, and wildlife conservation, but still illegal activities occur within the area. In order to effectively conserve the forest park, we expanded our conservation network with local community involvement, a multidisciplinary research team, and international collaborators as well as acquiring additional support from government and non-government organizations. We proposed establishing the Tak Petrified Wood Geopark covering an area 6,428 sq.km. using living and fossil plants as flagships for connecting locals and tourists with biodiversity, culture, and other aspects thus empowering local communities. With an aim of becoming a UNESCO Global Geopark for sustainable conservation, we hope to benefit the local economy and promote sustainable tourism in the region. We believe this project can serve as a model for long term conservation in Tak Province to generate interest in protecting an area.