An assessment of productivity in successional stages from abandoned swidden (rai) to dry evergreen forest in northeastern Thailand.

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ABSTRACT

The productivity (Biomass) in a successional series of former Swidden (rai) derived from the destruction of Dry Dipterocarp Forest in northeastern Thailand were investigated in the fall of 1976 at the Forest Experiment Station at Sakaerat Swidden of 1, 3, 6, 9 and 20 + years following the last crop were sampled. For comparison, a second-growth forest of indeterminate age was sampled in the same area. All former Swidden though 20 + years supported stands of *Saccharum sponteneum* with varying amount of either or both *Imperata cylindrica* and/or *Eupatorium odoratum* as Co-dominants. The biomass of these three species was roughly comparable during 9 yrs of succession, varying from 7.7 Mt./Ha to 16.1 Mt./Ha. with a mean of 12.3 Mt./Ha.(dry weight). By 20 + yrs., the biomass of these 3 species amounted to 7.8 Mt./Ha. but wood species had become dominant with a biomass of 39.2 Mt./Ha (dry weight). In contrast, the biomass of the second-growth forest was 269.6 Mt./Ha (dry weight).