IMPORTANCE OF TERMITES IN MODIFYING CERTAIN
THAILAND SOILS

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In many parts of Thailand outside the low, flat, and intermittently
flooded Bangkok plain, termite mounds and the characteristic
sorts of trees and shrubs which they carry are a striking feature of the
landscape (Fig. 1). These mounds, often 2 to 3 meters high and from
5 to 7 meters in diameter at the base, are hard and difficult to dig into
for they are built of relatively heavy textured soil material brought
up from some distance below the soil surface. In the process of build-
ing these mounds the termites puddle the soil well. The mounds are
also striking because of the different uses to which the farmers put
the termite mound surfaces as contrasted with the utilization, or
absence of it, of the normal soils upon which the mounds stand.
This, at once attracts the attention of anyone interested in land use
problems. These land use differences are particularly conspicuous on
the very poor, acid, sandy laterite soils, and in the padi (lowland,
flooded rice) regions (3).

Probably because of the considerable labor involved, Thai farmers
are not usually interested in levelling down or obliterating the
mounds. Many farmers also believe that the mounds are inhabited
by spirits, so that they had best not be destroyed. The farmers prefer
to clear the brush and trees from the mounds and at the commence-
ment of the rains, plant on the mound such crops which will very
seldom thrive on the infertile soil of the open forest or do not grow
at all on the wet, usually saturated soil of the plain round about,
such as tobacco, chillies, mulberry, papaya, string beans, cotton, etc.
(Fig. 2). Usually the caingin method (2) of clearing and planting is
followed. Just before the beginning of the rains the dry brush is
burned on the place where it was cut; then after the first rains have
sufficiently moistened the surface, seeds or cuttings are planted di-
rectly on the mounds, without any preliminary cultivation, in very
small holes (a few cm wide and deep) dug in the surface. In north-
eastern Thailand the upper half of the mound is often dug down, to
give an elevated plot for more intensive garden culture.

Near about the farmstead the termite mounds make an excellent
base on which to build the straw stack or to place the rice milling
mortar and walking-beam pestle. And in the extensive regions of
poor sandy soils, which unless irrigated will not often produce any
agricultural crop at all, the mounds in the open forests nearer the
occasional villages are frequently cleared, planted to various “up-
land” crops and fenced against the cattle which pasture in the forests.

For cultivating rice, which is the universal crop in the lowlands,
the Thai farmers use but the simplest of cultivation tools, usually
drawn by a single water buffalo, or in some districts by a pair of small
cattle. Hence, the mounds scattered here and there in the rice fields

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1. Contribution from the Department of Agriculture and Fisheries, Bangkok,
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2. Agronomist.
3. Figures in parenthesis refer to “Literature Cited”, p. 344.