

Table S1. Studies that have reported forage substrates in fungus-growing termite species, summarized in Figure 2 of the main text. Species names are given as reported in the respective references. The references Eggleton et al. [1] and Nkunika [2] did not explain what the taxonomical annotations ‘near’ and ‘?’ mean in their studies.

Termite species	Forage substrate	Reference
<i>Macrotermes</i> sp.	wood and grass	[3]
<i>Macrotermes</i> sp.	wood, grass and leaf litter	[4]
<i>Macrotermes</i> sp.	dead plant material	[5]
<i>Macrotermes</i> sp.	dung, wood and grass litter	[6]
<i>Macrotermes</i> sp.	dung, wood and grass litter	[7]
<i>Macrotermes</i> spp.1	grass litter	[8]
<i>Macrotermes</i> spp.2	grass litter	[8]
<i>Macrotermes</i> spp.3	grass litter	[8]
<i>Macrotermes</i> spp.4	grass litter	[8]
<i>Macrotermes michaelsoni</i>	grass litter, roots and fresh plants	[9]
<i>Macrotermes michaelsoni</i>	dead roots	[10]
<i>Macrotermes michaelsoni</i>	woody litter, elephant dung	[11]
<i>Macrotermes michaelsoni</i>	woody litter, eucalyptus fresh and decaying leaves	[12]
<i>Macrotermes michaelsoni</i>	standing dead grass, grass litter	[13]
<i>Macrotermes michaelsoni</i>	dead wood	[14]
<i>Macrotermes michaelsoni</i>	live grass	[5]
<i>Macrotermes michaelsoni</i>	wood and grass litter	[15]
<i>Macrotermes subhyalinus</i>	grass litter, fresh plant material and roots (the last if litter is in short supply)	[16]
<i>Macrotermes subhyalinus</i>	leaves and dead wood fragments from trees or logs	[17]
<i>Macrotermes subhyalinus</i>	log and twigs	[18]
<i>Macrotermes subhyalinus</i>	dung, wood and grass litter	[15]
<i>Macrotermes subhyalinus</i>	millet canes, dung, wood litter	[19]
<i>Macrotermes bellicosus</i>	dead wood fragments from trees or logs	[17]
<i>Macrotermes bellicosus</i>	log and twigs	[18]
<i>Macrotermes bellicosus</i>	grass litter	[8]
<i>Macrotermes bellicosus</i>	live wood	[20]
<i>Macrotermes bellicosus</i>	dead grass	[21]
<i>Macrotermes herus</i>	grass litter	[8]
<i>Macrotermes gilvus</i>	fresh leaves and grass	[22]
<i>Macrotermes gilvus</i>	grass stalks, leaves, grass blades, fallen mango leaves	[23]
<i>Macrotermes gilvus</i>	wood, bark and grass	[24]
<i>Macrotermes gilvus</i>	wood	[25]
<i>Macrotermes natalensis</i>	grass, leaves, thorns, fruit husks, twiglets	[26]
<i>Macrotermes natalensis</i>	dry wood, cow dung, decaying wood and bark	[27]
<i>Macrotermes natalensis</i>	live wood	[20]
<i>Macrotermes natalensis</i>	wood litter	[28]
<i>Macrotermes falciger</i>	live wood	[2]
<i>Macrotermes falciger</i>	live wood	[20]

<i>Macrotermes falciger</i>	dung, wood and grass litter	[15]
<i>Macrotermes malaccensis</i>	live wood and roots	[29]
<i>Macrotermes ukuzii</i>	dung, wood and grass litter	[15]
<i>Microtermes</i> sp.	wood and grass	[3]
<i>Microtermes</i> sp.	wood (dead and fresh material)	[30]
<i>Microtermes</i> sp.	dung and wood	[6]
<i>Microtermes</i> sp.	roots, grass and wood litter	[4]
<i>Microtermes</i> sp.	dead wood	[14]
<i>Microtermes</i> sp.	dead plant material	[5]
<i>Microtermes</i> spp.	log and twigs	[18]
<i>Microtermes</i> spp.	Fresh roots and dry wood	[2]
<i>Microtermes</i> spp.	small twigs, broken branches, woody, grass, and leaf litter,	[11]
<i>Microtermes</i> spp.	leaves	[17]
<i>Microtermes ?albopartitus</i>	wood	[1]
<i>Microtermes ?alluaudanus</i>	wood	[1]
<i>Microtermes ?aluco</i>	wood	[1]
<i>Microtermes alluaudanus</i>	dung, wood fragments	[31]
<i>Microtermes congoensis</i>	wood	[1]
<i>Microtermes depauperata</i>	wood	[1]
<i>Microtermes grassei</i>	wood	[1]
<i>Microtermes mycophagus</i>	wood, fresh plant material (trees and leaves)	[32]
<i>Microtermes obesi</i>	fresh leaves and wood	[33]
<i>Microtermes pakistanicus</i>	dead plant material, palm trees, sugar cane	[34]
<i>Microtermes subhyalinus</i>	sugar cane	[35]
<i>Microtermes toumodiensis</i>	wood litter	[36]
<i>Microtermes unicolor</i>	fresh leaves and wood	[37]
<i>Microtermes yemenensis</i>	fresh plant material	[38]
<i>Odontotermessp.</i>	dung and wood	[6]
<i>Odontotermes</i> sp.	dead plant material	[5]
<i>Odontotermes</i> sp.	woody litter	[11]
<i>Odontotermes</i> sp.	dry wood, cow dung	[27]
<i>Odontotermes</i> sp.	wood, grass and leaf litter	[4]
<i>Odontotermes</i> sp.	dry wood	[2]
<i>Odontotermes</i> sp.1	wood	[1]
<i>Odontotermes</i> sp.2	wood	[1]
<i>Odontotermes</i> sp. near <i>badius</i>	dry wood	[2]
<i>Odontotermes</i> sp. near <i>kinarensis</i>	live roots	[2]
<i>Odontotermes</i> spp.	log and twigs	[18]
<i>Odontotermes</i> spp.1	grass litter	[8]
<i>Odontotermes</i> spp. 2	grass litter	[8]
<i>Odontotermes</i> sp. A	dead wood fragments from trees or logs	[17]
<i>Odontotermes</i> sp. A	dead wood	[14]
<i>Odontotermes</i> sp. A	wood and grass	[3]
<i>Odontotermes</i> sp. B	dead wood fragments from trees or logs	[17]

<i>Odontotermes</i> sp. B	wood and grass	[3]
<i>Odontotermes</i> sp. B	dead wood	[14]
<i>Odontotermes</i> sp. C	dead wood fragments from trees or logs	[17]
<i>Odontotermes pauperans</i>	dead wood fragments from trees or logs	[17]
<i>Odontotermes pauperans</i>	monocot litter	[36]
<i>Odontotermes formosanus</i>	log and fresh leaves	[39]
<i>Odontotermes formosanus</i>	Dead wood	[40]
<i>Odontotermes badius</i>	dry wood, cow dung,	[27]
<i>Odontotermes badius</i>	dead wood, sound wood and live wood from eucalyptus	[2]
<i>Odontotermes badius</i>	dung, wood and grass litter	[15]
<i>Odontotermes boanicus</i>	dung and wood	[41]
<i>Odontotermes mediocris</i>	dung, wood fragments	[31]
<i>Odontotermes zambesiensis</i>	dung, wood fragments	[31]
<i>Odontotermes lokanandi</i>	fresh leaves and wood	[37]
<i>Odontotermes lokanandi</i>	fresh leaves and wood	[33]
<i>Odontotermes latericius</i>	dung and wood	[15]
<i>Odontotermes obesus</i>	roots	[42]
<i>Odontotermes nilensis</i>	millet canes and Acacia litter, cow dung	[19]
<i>Odontotermes transvaalensis</i>	live roots and dry wood	[2]
<i>Odontotermes transvaalensis</i>	dung and wood	[15]
<i>Odontotermes patruus</i>	dung and wood	[41]
<i>Odontotermes amaniensis</i>	wood	[43]
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<i>Allodotermes</i> sp.	woody litter	[11]
<i>Allodotermes</i> sp.	wood and grass	[3]
<i>Allodotermes</i> sp.	dead wood	[14]
<i>Allodotermes</i> sp.	dung, wood and grass litter	[6]
<i>Allodotermes rhodesiensis</i>	sound wood (dry wood) of eucalyptus (dry)	[2]
<i>Allodotermes schulzei</i>	live and dead wood	[2]
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<i>Synacanthotermes zanzibarensis</i>	wood fragments	[31]
<i>Synacanthotermes zanzibarensis</i>	Fresh roots and live wood	[2]
<i>Synacanthotermes heterodon</i>	wood	[1]
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<i>Ancistrotermes</i> sp.	wood (dead and fresh material)	[30]
<i>Ancistrotermes</i> sp.	roots, grass and wood litter	[4]
<i>Ancistrotermes cavithorax</i>	log and twigs	[44]
<i>Ancistrotermes cavithorax</i>	wood litter	[36]
<i>Ancistrotermes crucifer</i>	dead wood fragments from trees or logs	[17]
<i>Ancistrotermes guineensis</i>	millet canes, wood	[19]
<i>Ancistrotermes latinotus</i>	dead wood	[14]
<i>Ancistrotermes latinotus</i>	live roots	[15]
<i>Ancistrotermes latinotus</i>	dung, wood and grass litter	[15]
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<i>Protermes</i> sp.	dry wood (eucalyptus)	[2]
<i>Protermes birticeps</i>	dead wood fragments from trees or logs	[17]
<i>Protermes minutus</i>	leaves and dead wood fragments from trees or logs	[17]
<i>Protermes prorepens</i>	wood and litter	[1]
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<i>Pseudacanthotermes militaris</i>	dead wood fragments from trees or logs	[17]
<i>Pseudacanthotermes militaris</i>	dung, wood and grass litter	[45]
<i>Pseudacanthotermes militaris</i>	dead leaves, twigs, branches, logs, sound wood. Live roots and live wood	[2]

<i>Pseudacanthotermes militaris</i>	sugar cane	[46]
<i>Pseudacanthotermes militaris</i>	corn	[17]
<i>Pseudacanthotermes militaris</i>	live wood (tea)	[47]
<i>Pseudacanthotermes militaris</i>	rice	[48]
<i>Pseudacanthotermes militaris</i>	live roots (cassava)	[49]
<i>Pseudacanthotermes militaris</i>	sugar cane	[50]
<i>Pseudacanthotermes militaris</i>	wood and litter	[1]
<i>Pseudacanthotermes spiniger</i>	wood and litter	[1]
<i>Pseudacanthotermes spiniger</i>	dead leaves, twigs, branches, logs, sound wood, live wood	[2]
<i>Pseudacanthotermes spiniger</i>	wood and bark	[26]
<i>Pseudacanthotermes</i> spp.	grass litter	[8]
<i>Pseudacanthotermes</i> sp.	dead plant material	[5]
<i>Acanthotermes acanthorax</i>	wood and bark	[26]
<i>Acanthotermes</i> spp.	grass, live root, live wood, fresh leaves	[51]
<i>Acanthotermes acanthothorax</i>	wood and litter	[1]

Supplementary References

1. Eggleton, P.; Bignell, D. E.; Sands, W. A.; Waite, B.; Wood, T. G.; Lawton, J. H. The species richness of termites (Isoptera) under differing levels of forest disturbance in the Mbalmayo Forest Reserve, southern Cameroon. *J. Trop. Ecol.* **1995**, *11*, 85–98.
2. Nkunika, P. O. Y. A survey of the termite species associated with *Eucalyptus* plantations in Zambia. *Zambia J. Sci. Technol.* **1980**, *5*, 33–38.
3. Schuurman, G. Foraging and distribution patterns in a termite assemblage dominated by fungus-growing species in semi-arid northern Botswana. *J. Trop. Ecol.* **2006**, *22*, 277–287, doi:10.1017/S0266467405003044.
4. Longhurst, C.; Howse, P. E. The use of kairomones by *Megaponera foetens* (Fab.) (Hymenoptera: Formicidae) in the detection of its termite prey. *Anim. Behav.* **1978**, 2013–2018, doi:10.1016/0003-3472(78)90111-2.
5. Abe, T. Termite community in the grassland of Kenya with special reference to their feeding habits. In *Social insects and the environment. Proceedings of the 11th International Congress of IUGSS, 1990 (International Union for the Study of Social Insects).*; 1990; pp. 207–208.
6. Coaton, W.; Sheasby, J. Preliminary report on a survey of the termites (Isoptera) of South West Africa. *Cimbebasia Mem.* **1972**, *2*, 1–129.
7. Ouédraogo, E.; Mando, A.; Brussaard, L. Soil macrofaunal-mediated organic resource disappearance in semi-arid West Africa. *Appl. Soil Ecol.* **2004**, *27*, 259–267, doi:10.1016/j.apsoil.2004.03.003.
8. Mugerwa, S.; Nyangito, M.; Mpairwe, D.; Nderitu, J. Effect of biotic and abiotic factors on composition and foraging intensity of subterranean termites. *African J. Environ. Sci. Technol.*

2011, 5, 579–588, doi:10.5897/AJEST11.088.

9. Lepage, M. G. L'impact des populations récoltantes de *Macrotermes michaelseni* (Sjostedt) (Isoptera, Macrotermitinae) dans un écosystème semi-aride (Kajiado-Kenya) - I - L'activité de récolte et son déterminisme. *Insectes Soc.* **1981**, 28, 297–308, doi:10.1007/BF02223630.
10. Lepage, M. Foraging and food consumption of *Macrotermes subhyalinus*. In *VIIIth International Congress IUISS*; 1977; pp. 249–252.
11. Dangerfield, J. M.; Schuurman, G. Foraging by fungus-growing termites (Isoptera : Termitidae, Macrotermitinae) in the Okavango Delta, Botswana. *J. Trop. Ecol.* **2000**, 16, 717–731.
12. Boutton, T. W.; Arshad, M. A.; Tieszen, L. L. Stable isotope analysis of termite food habits in East African grasslands. *Oecologia* **1983**, 59, 1–6, doi:10.1007/BF00388065.
13. Lepage, M. L' impacte des populations récoltantes des *Macrotermes michaelseni* (Sjostedt) (Isoptera: Macrotermitinae) dans un écosystème semi-aride (Kaijaido – Kenya) II. Nourriture récoltée, comparaison avec les grands herbivores. *Isectes Sociaux* **1981**, 28, 309–319.
14. Schuurman, G. Decomposition rates and termite assemblage composition in semiarid Africa. *Ecology* **2005**, 86, 1236–1249, doi:10.1890/03-0570.
15. Mitchell, B. L. Report on a survey of the termites of Zimbabwe. *Occas. Pap. Natl. Museum South. Rhod.* **1980**, 6, 187 – 323.
16. Lepage, M. *The impact of foraging populations of the termite Macrotermes subhyalinus on a semi-arid ecosystem (Kajiado, Kenya).*; Nairobi, 1978.
17. Wood, A. T. G.; Johnson, R. A.; Bacchus, S.; Shittu, M. O.; Anderson, J. M. Abundance and Distribution of Termites (Isoptera) in a Riparian Forest in the Southern Guinea Savanna Vegetation Zone of Nigeria. *Assoc. Trop. Biol. Conserv.* **1982**, 14, 25–39.
18. Collins, N. M. The role of termites in the decomposition of wood and leaf litter in the Southern Guinea savanna of Nigeria. *Oecologia* **1981**, 51, 389–399, doi:10.1007/BF00540911.
19. Rouland, C.; Lepage, M.; Chotte, J. L.; Diouf, M.; Ndiaye, D.; Ndiaye, S.; Seugé, C.; Brauman, A. Experimental manipulation of termites (Isoptera, Macrotermitinae) foraging patterns in a Sahelo-Sudanese savanna: Effect of litter quality. *Insectes Soc.* **2003**, 50, 309–316, doi:10.1007/s00040-003-0680-6.
20. Sands, W. A. Observations on termites destructive to trees and crops. *North. Reg. Min. Agric. Samaru Res. Bull.* **1962**, 26, 1–14.
21. Korb, J.; Linsenmair, K. E. Evaluation of predation risk in the collectively foraging termite *Macrotermes bellicosus*. *Insectes Soc.* **2002**, 49, 264–269, doi:10.1007/s00040-002-8312-0.
22. Johjima, T.; Inoue, T.; Ohkuma, M.; Noparatnaraporn, N.; Kudo, T. Chemical Analysis of Food Processing by the Fungus-Growing Termite *Macrotermes gilvus*. *Sociobiology* **2003**, 42,

815–824.

23. Bathellier, J. Contribution à l'étude systématique et biologique des Termites de l'Indochine. *Faune Colon. Fran* **1927**, *1*, 125–365.
24. Kalshoven, L. G. E. Observations on *Macrotermes gilvus* Holmgr. In Java-3 Accumulations of finely cut vegetable matter in the nests. *Insectes Soc.* **1956**, *3*, 455–461, doi:10.1007/BF02225765.
25. Acda, M. N. Foraging Populations and Territories of the Tropical Subterranean Termite *Macrotermes gilvus* (Isoptera: Macrotermitinae). *Sociobiology* **2004**, *43*, 169–177.
26. Grassé, P. P.; Noirot, C. La transmission des flagellés symbiotiques et les aliments des termites. *Bull. Biol. Fr. Belg.* **1945**, *79*, 273–292.
27. da Costa, R. R.; Hu, H.; Pilgaard, B.; Sabine, S. M.; Schückel, J.; Pedersen, K. S. K.; Kračun, S. K.; Busk, P. K.; Harholt, J.; Sapountzis, P.; Lange, L.; Aanen, D. K.; Poulsen, M. Enzyme activities at different stages of plant biomass decomposition in three species of fungusgrowing termites. *Appl. Environ. Microbiol.* **2018**, *84*, e01815-17, doi:10.1128/AEM.01815-17.
28. Meyer, V. W.; Crewe, R. M.; Braack, L. E. O. Estimates of food consumption by the fungusgrowing termite *Macrotermes natalensis* in a South African savanna-woodland. *S. Afr. J. Sci.* **2003**, *99*, 207–208.
29. Santoso, E.; T., H. Pest and disease control of timber estates in East Kalimantan. *J. For. Res. Dev.* **1991**, *7*, 14–17.
30. N'Dri, A. B.; Gignoux, J.; Konaté, S. Food preferences and foraging strategies of wood-feeding termites in a West African savanna. *Curr. Sci.* **2018**, *114*, 186–192, doi:10.18520/cs/v114/i01/186-192.
31. Buxton, R. D. Termites and the turnover of dead wood in an arid tropical environment. *Oecologia* **1981**, *51*, 379–384.
32. Iqbal, N.; Saeed, S.; Evans, T. A.; Kwon, Y. J. Foraging activity and population estimation of *Microtermes mycophagus* Desneux (Isoptera: Termitidae: Macrotermitinae) in Multan, Punjab, Pakistan. *Entomol. Res.* **2015**, *45*, 51–57, doi:10.1111/1748-5967.12094.
33. Sattar, A.; Naeem, M.; ul-Haq, E. Impact of environmental factors on the population dynamics, density and foraging activities of *Odontotermes lokanandi* and *Microtermes obesi* in Islamabad. *Springerplus* **2013**, *2*, 1–7, doi:10.1186/2193-1801-2-349.
34. Lee, C. Y.; Ngee, P. S.; Lee, L. C. Foraging populations and territories of a mound-building subterranean termite, *Microtermes pakistanicus* (Isoptera: Macrotermitinae). *Sociobiology* **2003**, *41*, 307–316.
35. Mora, P.; Rouland, C.; Renoux, J. Foraging, nesting and damage caused by *Microtermes subhyalinus* (Isoptera: Termitidae) in a sugarcane plantation in the Central African Republic.

Bull. Entomol. Res. **1996**, *86*, 387, doi:10.1017/S0007485300034970.

36. Jouquet, P.; Boulain, N.; Gignoux, J.; Lepage, M. Association between subterranean termites and grasses in a West African savanna: Spatial pattern analysis shows a significant role for *Odontotermes n. pauperans*. *Appl. Soil Ecol.* **2004**, *27*, 99–107, doi:10.1016/j.apsoil.2004.05.002.
37. Sattar, A.; Misbah, M.; Salihah, Z.; Khatoon, R. Foraging Activity of *Microtermes unicolor* Synder and *Odontotermes lokanandi* Chatterjee and Thakur (Termitidae, Isoptera) in Peshawar, Pakistan. *Suranaree J. Sci. Technol.* **2007**, *15*, 69–74.
38. Al-Hemyari, A. A. Factors affecting foraging activity of *Microtermes yemenensis* (Isoptera: Termitidae). *Ann. Agric. Sci.* **1994**, *32*, 987–995.
39. Soleymaninejadian, E.; Ji, B. Z.; Liu, S. W.; Yang, J. J.; Wang, H. J.; Ding, F. Polyethism in *Odontotermes formosanus* Shiraki. *Int. J. Biol. Med. Res.* **2014**, *5*, 4231–4238.
40. Chiu, C. I.; Yeh, H. T.; Li, P. L.; Kuo, C. Y.; Tsai, M. J.; Li, H. F. Foraging Phenology of the Fungus-Growing Termite *Odontotermes formosanus* (Blattodea: Termitidae). *Environ. Entomol.* **2018**, *47*, 1509–1516, doi:10.1093/ee/nvy140.
41. Kemp, P. B. The termites of north-eastern Tanganyika: their distribution and biology. *Bull. Entomol. Res.* **1955**, *46*, 112 – 135.
42. Malik, M. U.; Javed, H.; Ayyaz, M. Evaluation of Different Groundnut *Arachis hypogea* L. Cultivars Against Termites, *Odontotermes obesus* (Rambur) in Rawalpindi, Pakistan. *Turkish J. Agric. - Food Sci. Technol.* **2015**, *3*, 448–452.
43. Burchard, I. On the removal of herbivore dung by *Odontotermes* spp. in Africa. *Sociobiology* **1989**, *15*, 261.
44. Collins, N. M. The role of termites in the decomposition of wood and leaf litter in the Southern Guinea savanna of Nigeria. *Oecologia* **1981**, *51*, 389–399, doi:10.1007/BF00540911.
45. Mitter, C.; Farrell, B.; Wiegmann, B. The Phylogenetic Study of Adaptive Zones: Has Phytophagy Promoted Insect Diversification? *Am. Nat.* **1988**, *132*, 107–128, doi:10.1086/284840.
46. Wheatley, P. E.; Crowe, T. J. *Pest Handbook: The Recognition and Control of the More Important Pests of Agriculture in Kenya*; Government Printer: Nairobi, Kenya, 1967;
47. Benjamin, D. M. Insects and mites on tea in Africa and adjacent islands. *East Africa Agric. For. J.* **1968**, *33*, 345–357.
48. Togola, A.; Kotoklo, E. A.; Nwilene, F. E.; Amevoin, K.; Glitho, I. A.; Oyetunji, O. E.; Kiepe, P. Specific diversity and damage of termites on upland rice in Benin. *J. Entomol.* **2012**, *9*, 352–360, doi:10.3923/je.2012.352.360.
49. Sands, W. A. Termites as pests of tropical food crops. *Pest Artic. News Summ.* **1973**, *19*, 167–177.

50. Dibangou, V.; Mora, P.; Celini, L.; Rouland-LeFèvre, C. Spatial distribution and density of fungus-growing termite *Pseudacanthotermes militaris* (Isoptera: Macrotermitinae) in the Congo Republic. *Asian J. Biol. Sci.* **2012**, *5*, 406–416.
51. Nair, K. S. S. *Tropical forest insect pests: Ecology, impact, and management.*; Cambridge University Press, 2007.