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*Rice, Agriculture, and the Food Supply in Premodern Japan* by the French scholar Charlotte von Verschuer is a much anticipated addition to the Needham Research Institute Monograph Series. Translated by Wendy Cobcroft, this volume is an updated and revised version of von Verschuer’s 2003 monograph, *Le riz dans la culture de Heian: Mythe et réalité*. In this new form, accessible to the international scholarly audience, this book is a welcome and valuable contribution to the global and site-specific studies of the histories of agriculture, technology, and the environment, as well as to the histories of knowledge and science of East Asia. Needless to say, this book will also be indispensable reading for those wishing to study premodern Japan. The volume is accompanied by multiple illustrations, maps, and tables, as well as a very useful appendix, which includes a catalogue of edible and crop plants with names provided in premodern and modern Japanese, Latin, English, German, and French; a list of traditional measures used in Japan and East Asia; a chronological table that explains the book’s timeline; a seventeenth-century agricultural calendar from one of Japan’s northern regions; and caloric values of foods discussed throughout the monograph.

The book’s main aim is nothing less than to revise and correct the long-received idea that rice has been the main staple of Japan’s agriculture and diet for over two millennia. Drawing on an impressive array of premodern Japanese sources, which vary from eighth-century official histories and poetry to seventeenth-century agricultural treatises, as well as modern archaeological and ethnological data, the book argues in favor of discerning the various agricultural techniques and methods of food production and supply in premodern Japan. To that extent, the Japanese subtitle of this study, *gokoku bunka* 五穀文化 (the culture of five grains), although currently left untranslated in English, conveys an additional sense of how much premodern Japan’s subsistence economy had been

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historically reliant on the country’s biological, geographical, and climatic diversity and “the plant kingdom as a whole” (1).

Von Verschuer argues that the idea of Japan’s traditional agriculture as based predominantly on the irrigated cultivation of rice emerged as a result of reading the surviving premodern written sources, mostly of an administrative nature, which were produced by the elite and state structures and which privileged rice as a tax currency. This idea of rice cultivation as something intrinsic to Japanese history and culture received much attention in twentieth-century Japanese scholarship, starting with that of Yanagita Kunio (1875–1962), a founding figure of Japan’s native folklore studies; in the post-WWII era, this idea became widely adopted into public discourse. Based on newer findings in Japanese archaeology, von Verschuer’s current study challenges this view by analyzing historical data, focusing on several different types of agricultural cultivation traditionally practiced in premodern Japan. These included not only irrigated rice fields but also nonirrigated (dry) cereal fields and permanent and shifting fields, as well as gardens with vegetables and fruit trees.

The first chapter, by far the longest, begins with a vista of the diversity of Japanese vegetation and climate. Based upon this, it then provides a farmer’s view of the agricultural production cycle, along with its many techniques and aspects: fertilization, irrigation, transplanting, weeding, harvesting, hulling, husking, threshing, and storage. It is here that the author begins to introduce traditional Japanese vocabulary and technical terminology, as well as varieties of Japanese farming techniques, tools, and management of agrarian space. These fascinating details will, no doubt, draw the attention of readers interested in the history of East Asian science and technology. This chapter also surveys early medieval (eighth through twelfth centuries), late medieval (thirteenth through sixteenth centuries), and early modern (seventeenth through nineteenth centuries) historical sources and includes thirteen black-and-white illustrations from early modern woodblock printed Japanese books. These illustrations, although they are not always discussed in the exact order of their appearance, certainly make the chapter’s flow both enlightening and entertaining.

The second chapter shifts its gaze onto the most overlooked aspect of Japanese traditional agriculture: swidden farming (cultivation of land from which the vegetation has been burned off) and the shifting cultivation that went on in the mountainous regions. Von Verschuer argues that during the premodern period the mountainous areas formed the overwhelming majority of Japan’s landscape. Here, we learn of the methodological advantages and uncertainties of using early medieval poetry, lexicography, and toponymy as historical data; some of the previous Japanese research cited in this chapter (and other chapters, for that matter) dates back to the last three decades of the twentieth century. However, featuring a more up-to-date discussion of recent discoveries at the Sannai-Maruyama site in modern Aomori prefecture, this chapter also provides a snapshot of important debates in Japanese paleobotany and archaeology of farming. Moreover, it brings to the fore new connections between previously unrelated written and material sources and almost forgotten methods of land clearing by fire, as well as those of traditional forest management.

The latter theme leads to the next topic, discussed in chapter 3: the harvesting of wild plants and their importance in the diet of premodern Japanese, from the Neolithic up to the modern period. Here, the author continues to introduce important Japanese terminology, procured from early medieval sources and verified, wherever possible, against a number of modern plant classifications (to this end, even more helpful information is provided in the appendix). In addition to fruits and vegetables traditionally foraged for the food supply in premodern Japan, chapter 3 introduces several more significant categories that will be of interest to a broad audience of scholars. These
include medicinal products, oils, dyes, textiles, cereals, straws, and stems. The expert
discussion of these items and their significance in Japan’s premodern everyday life,
especially the presentation of the Japanese and English plant names in tables, will be
helpful for historians of East Asian medicine and material culture.

Food security and its relation to the production and consumption of agricultural items
is the subject of chapter 4. Here, the author launches an impressive project of calculating
the approximate yearly food reserves, needs, and calorimetric estimates of the premodern
Japanese. Although the historical data is again limited, this chapter aims to present a
nuanced set of numbers that help to envision the lives of well-to-do, average, and dis-
advantaged households from different regions of Japan, during the years when agricul-
tural production and harvests were both good and bad. This helps to bring this chapter’s
main question, “Just how much rice was actually eaten in premodern Japan?,” to a
thought-provoking and by now well-justified conclusion: von Verschuer argues that it
is the variously defined “five grains,” that is rice, millets, and leguminous plants, “and not
exclusively rice, that constituted the staple food in premodern Japan” (259).

The last chapter of this monograph strengthens the book’s overall argument further,
by focusing on grain polyculture in early medieval Japan. It begins by investigating the
mythology of rice in early Japanese written sources as well as early medieval imperial
court rituals featuring rice and other foods. But the most salient point is brought forth
by the analysis of early medieval Japanese manuscripts, which, as von Verschuer has
discovered, often transliterated the premodern Japanese terms describing generic grain
properties in an ambiguous way. How these terms and properties became understood
solely as those attributed to rice becomes evident from a lexicographic and philological
analysis of these early written sources, as well as from a survey of the Shintoist and
nativist scholarship that had developed in late medieval and early modern Japan. Here,
the reader will sense a causal link to the nineteenth- and twentieth-century processes of
Japan’s modern nation-state building, before being taken back to the discussion of
cereals and the ideology of the “five grains” in Japanese history.

The book’s conclusion revisits the reasons as to why irrigated rice cultivation had
become such a predominant idea in defining what it is to be Japanese: the scarcity of the
surviving historical sources, imbalances in the twentieth-century scholarship, mytho-
logical twists, and cultural practices. Despite these factors, von Verschuer argues that,
rather than relying solely on rice as their staple food, the premodern Japanese adopted
not one but three methods of food acquisition: “(1) permanent crops including irrigated
rice cultivation, dry cereal crops and horticulture; (2) shifting crops including swidden
fields and agri-sylviculture; and (3) foraging for wild edible plants, fruits, nuts and
tubers” (300). In doing so, she presents a very significant and important study that
should be appreciated by scholars of premodern societies, history, technology, and
sciences broadly across the spectrum of East Asian studies.

Anna Andreeva earned her PhD from Cambridge in 2007 and worked as a postdoctoral and research fellow
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