Archaeobotanical and archaeological evidence for the domestication and spread of millets and associated crops within East Asia

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In the past 10 years it has been proposed both that the domestication of rice predates that of millets and that its spread north led to millet domestication (Bellwood 2005), and vice-versa, that millets were domesticated prior to rice and the rise of millet farming communities led to the domestication of rice (Bar-Yosef 2011). As shown for many other cereals, the domestication of millets is likely to have been a protracted process. Further, along with other East Asian domesticates, these domestications potentially have a number of independent origins. As yet the processes leading to the domestication of *Setaria italica* and *Panicum miliaceum* are much less well understood than rice, wheat and barley. This paper will explore the timing, geographical spread and processes of domestication of millets, and how the relationship between humans and millets gradually led to both changes within the morphology and physiology of the plants themselves as well as cultural changes within the societies who cultivated and domesticated them. We will also consider a number of other East Asian cultigens, and how the archaeobotanical record along with genetic evidence is providing new insights into domestication processes.