The study of different fills in several storage pits from the medieval rural sites of Dassargues and Lunel-Viel in Languedoc (Hérault, France) offers the opportunity to re-examine the question of the agrarian areas and the crops cultivated during the 10th – 11th centuries AD in this region. These primary or secondary burnt deposits provided the principal components of the farming practices in the Mediterranean low plains of Languedoc during the high medieval period: the major economic role of cereals (hulled barley and free-threshing wheat), the secondary place of the grapevine, and the importance of pulses (horse bean, pea and chickpea). The data from seed and fruit remains found in these sites complete the information from medieval written sources. Despite the fact that large areas of storage pits were excavated (more than 200 silos at Dassargues), only a few provided concentrations of archaeobotanical remains. Most of the pits were filled with secondary deposits. At Lunel-Viel, the small capacity of the pits has suggested that they were used for family consumption and/or to store seeds for sowing. But the fact that this storage area composed of several tens of pits was located outside the village would however indicate that the peasant population managed its storage communally. At Dassargues, the results indicate that the concentration of wheat and barley came from a burnt store other than a pit, probably a habitat. The poster will present the crop spectrum diversity attested for the two sites and discuss the possibility on the one hand of mixed crop storage (cereals and/or pulses), and on the other hand the existence of two simultaneous methods of storage: in pits and in buildings.