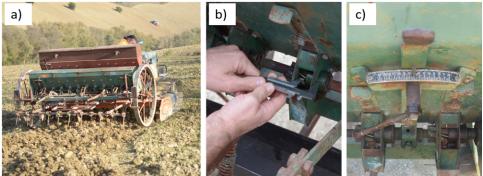
## SUPPLEMENTARY MATERIAL



**SM 1:** Experimental layout for the medium scale experiment. Different colours represent homogeneous areas for soil texture and chemical fertility. According to the USDA soil classification in the yellow-orange area the soil is classified as clay-loam (sand: 32%, clay: 28%, silt: 40%, pH: 7.9, available P: 9 mg/kg, total N: 0.92 g/kg, Organic matter: 1.44%). In the blue area the soil is classified as loam (sand: 33%, clay: 20.5%, silt: 46.5%, pH:8, available P: 10 mg/kg, total N: 0.71 g/kg, Organic matter: 1.13%). In the red area soil is classified as sandy-clay-loam (sand: 56%, clay: 28%, silt: 16%, pH: 7.9, available P: 8 mg/kg, total N: 0.52 g/kg, Organic matter:0.74%).



**SM 2:** The seeding machine was modified for intercropping and equipped with two independent hoppers respectively for wheat and lentil (a). The machine was manually set up for wheat and lentil to associate the target seed density of the experiment with the respective point of graduated scale of the machine (b and c).