

Materials List for:

# Cereal Crop Ear Counting in Field Conditions Using Zenithal RGB Images

José A. Fernandez-Gallego<sup>1,2,3</sup>, María Luisa Buchailot<sup>1,2</sup>, Adrian Gracia-Romero<sup>1,2</sup>, Thomas Vatter<sup>1,2</sup>, Omar Vergara Diaz<sup>1,2</sup>, Nieves Aparicio Gutiérrez<sup>4</sup>, María Teresa Nieto-Taladriz<sup>5</sup>, Samir Kerfal<sup>6</sup>, Maria Dolors Serret<sup>1,2</sup>, José Luis Araus<sup>1,2</sup>, Shawn C. Kefauver<sup>1,2</sup>

<sup>1</sup>Plant Physiology Section, Faculty of Biology, University of Barcelona

<sup>2</sup>Agrotecnio

<sup>3</sup>Programa de Ingeniería Electrónica, Facultad de Ingeniería, Universidad de Ibagué

<sup>4</sup>Instituto Tecnológico Agrario de Castilla y León (ITACyL)

<sup>5</sup>Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria (INIA)

<sup>6</sup>Syngenta Spain

Correspondence to: Shawn C. Kefauver at [sckefauver@ub.edu](mailto:sckefauver@ub.edu)

URL: <https://www.jove.com/video/58695>

DOI: [doi:10.3791/58695](https://doi.org/10.3791/58695)

## Materials

Name	Company	Catalog Number	Comments
ILCE-QX1 Camera	Sony	WW024382	Compact large sensor digital camera with 23.2 x 15.4 mm sensor size.
E-M10 Camera	Olympus	E-M10	Compact large sensor digital camera with 17.3 x 13.0 mm sensor size.
Multipod Monpod	Sony	VCT MP1	"Phenopole" in the JoVE article
Computer	Any PC/Mac/Linux	--	Data and image analysis
ImageJ/FIJI (FIJI is just Image J)	NIH	<a href="http://fiji.sc">http://fiji.sc</a>	Plug-in and algorithms for data and image analysis
Circle/Metal Ring	Generic	Generic	Metal ring for in-field validation
Crab Pliers Clip	Newer	90087340	Circle support and extension arm