Table 2. Optical resolution, magnification, scan field size, zoom factor and digital resolution

Resolution of Obj					Image Field properties and zoom factor							
						512 x 512		1024 x 1024		2048 x 2048		4096 x 4096	
	NA of Obj	Wave length (nm)	Res at 1AU (nm)	Required pix size at 2x sampling (nm)	Scan Field size (μm)	Pixel size Obtained (nm)	Zoom needed for Max Res	Pixel size Obtained (nm)	Zoom needed for Max Res	Pixel size Obtained (nm)	Zoom needed for Max Res	Pixel size Obtained (nm)	Zoom needed for Max Res
10 x	0,3				1500	2930		1465		732		366	
		458	779	389			7,53		3,76		1,88		no need
		476	809	405			7,24		3,62		1,81		no need
		488	830	415			7,06		3,53		1,76		no need
		514	874	437			6,71		3,35		1,68		no need
		568	966	483			6,07		3,03		1,52		no need
		633	1076	538			5,45		2,72		1,36		no need
20 x	0,5				750	1465		732		366		183	
		458	467	234			6,27		3,13		1,57		no need
		476	486	243			6,03		3,02		1,51		no need
		488	498	249			5,89		2,94		1,47		no need
		514	524	262			5,59		2,79		1,40		no need
		568	579	290			5,06		2,53		1,26		no need
		633	646	323			4,54		2,27		1,13		no need
40 x	1,25				375	732		366		183		92	
		458	187	93			7,83		3,92		1,96		no need
		476	194	97			7,54		3,77		1,88		no need
		488	199	100			7,35		3,68		1,84		no need
		514	210	105			6,98		3,49		1,75		no need
		568	232	116			6,32		3,16		1,58		no need
		633	258	129			5,67		2,83		1,42		no need
63 x	1,32				238	465		232		116		58	
		458	177	88			5,26		2,62		1,31		no need
		476	184	92			5,06		2,52		1,26		no need
		488	189	94			4,93		2,46		1,23		no need
		514	199	99			4,68		2,34		1,17		no need
		568	219	110			4,24		2,11		1,06		no need
		633	245	122			3,80		1,90		no need		no need
100 x	1,4				150	293		146		73		37	
		458	167	83			3,51		1,75		no need		no need
		476	173	87			3,38		1,68		no need		no need
		488	178	89			3,30		1,64		no need		no need
		514	187	94			3,13		1,56		no need		no need
		568	207	103			2,83		1,41		no need		no need
		633	231	115			2,54		1,27		no need		no need

Note: Resolution is calculate from Abbe formula: Res=0.51xλ/NA

2x sampling frequency is used here, as it is an acceptable "under sampling" for confocal imaging,