

1 Supplementary materials to Efficient species segmentation
2 throughout the growing season of oilseed rape – service plant
3 intercropping using transfer learning

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7 June 26, 2025

Table S1: Detailed association of plants in the field experiment. Type of sown mixtures with oilseed rape (Mono: monocrop, InterBw: intercropping systems with buckwheat, Inter: intercropping systems without buckwheat) and detailed species association in the field experiment. Nig: niger, Bw: buckwheat, Cv: common vetch, Bc: berseem clover, Gp: grass pea, Lent.: lentils, Fb: faba bean, SOSR: summer oilseed rape, Must: mustard, Rad: radish.

Sown mixtures		Proportion of recommended density in pure stand (%)									
Type	N°	Nig	Bw	Cv	Bc	Gp	Lent	Fb	SOSR	Must	Rad
Mono	T01	No service plants with herbicide application									
Mono	T02	No service plants, without herbicide application									
InterBw	T03	14	14	14	14	14	14	14	0	0	0
InterBw	T04	17	17	17	17	17	17	0	0	0	0
InterBw	T05	20	20	0	20	20	20	0	0	0	0
InterBw	T06	20	20	20	0	20	20	0	0	0	0
InterBw	T07	20	20	20	20	0	20	0	0	0	0
InterBw	T08	20	20	20	20	20	0	0	0	0	0
InterBw	T09	0	20	20	20	20	20	0	0	0	0
Inter	T10	20	0	20	20	20	20	0	0	0	0
Inter	T11	0	0	20	20	20	20	20	0	0	0
Inter	T12	0	0	25	25	25	25	0	0	0	0
Inter	T13	0	0	0	33	33	33	0	0	0	0
Inter	T14	0	0	33	0	33	33	0	0	0	0
Inter	T15	0	0	33	33	0	33	0	0	0	0
Inter	T16	0	0	33	33	33	0	0	0	0	0
Inter	T17	0	0	0	0	50	50	0	0	0	0
Inter	T18	0	0	20	20	20	20	0	20	0	0
Inter	T20	0	0	20	20	20	20	0	0	0	20
Inter	T21	50	0	0	0	0	0	50	0	0	0
Inter	T22	0	0	0	50	00	0	50	0	0	0
Inter	T23	33	0	0	33	0	0	33	0	0	0

Table S2: Images acquisition dates with corresponding number of days after sowing (DAS) and oilseed rape growth stage (OSR stage) for each field experiment from 2018 to 2020.

Experiments 2018					
sowed on Aug. 20, Changins					
Date	19 Sept.	26 Sept.	10 Oct.	16 Oct.	
DAS	30	37	51	57	
OSR stage	15	16	18	18	
sowed on Aug. 22, Moudon					
Date	20 Sept.	26 Sept.	09 Oct.	15 Oct.	22 Oct.
DAS	29	35	48	54	61
OSR stage	14	15	16	16	16
Experiment 2019					
sowed on Aug. 26, Changins					
Date	13 Sept.	27 Sept.	07 Oct.	29 Oct.	
DAS	18	32	42	64	
OSR stage	12	15	17	18	
Experiment 2020					
sowed on Aug. 18, Changins					
Date	16 Sept.	24 Sept.	30 Sept.	08 Oct.	14 Oct.
DAS	29	37	43	51	57
OSR stage	14	14	16	17	17