

**Table S1.** Aggregate characteristics of the simulation units (SimU) in each country.

NUTS Code	Country	Total SimUs [#]	Irrigated SimUs [#]	Total simulated area [km <sup>2</sup> ]	Max.* size SimU [km <sup>2</sup> ]	Mean size SimU [km <sup>2</sup> ]	Mean N fertilizer [kg/ha]	Max.* N fertilizer [kg/ha]	Mean P fertilizer [kg/ha]	Max.* P fertilizer [kg/ha]	Mean K fertilizer [kg/ha]	Max.* K fertilizer [kg/ha]	Simulated crops <sup>+</sup>
AT	Austria	708	5	11432	976	16	60	119	13	25	40	204	CORN, CSIL, DWHT, FALW, FPEA, OATS, POTA, RAPE, SBAR, SGBT, SOYB, SUNF, WPAS, WRYE, WWHT
BE	Belgium	230	0	6991	722	30	133	282	30	65	102	469	CORN, CSIL, DWHT, FALW, FLAX, FPEA, OATS, POTA, RAPE, SBAR, SGBT, WPAS, WWHT
BG	Bulgaria	880	119	37178	1724	42	29	72	4	10	18	68	CORN, CSIL, POTA, RAPE, RICE, SBAR, SUNF, WRYE, WWHT
CZ	Czechia	1576	0	36035	856	23	61	120	10	20	24	113	CORN, CSIL, FALW, FPEA, OATS, POTA, RAPE, SBAR, SGBT, SUNF, WPAS, WRYE, WWHT
DE	Germany	5146	27	137926	2070	27	85	158	12	23	45	208	CORN, CSIL, FALW, FLAX, FPEA, OATS, POTA, RAPE, SBAR, SGBT, SUNF, WPAS, WRYE, WWHT
DK	Denmark	341	4	25882	1460	76	85	184	17	38	64	285	CSIL, FALW, FPEA, OATS, POTA, RAPE, SBAR, SGBT, WPAS, WRYE, WWHT
EE	Estonia	176	0	5770	1001	33	23	64	3	9	8	40	FALW, OATS, POTA, RAPE, SBAR, WPAS, WRYE, WWHT
ES	Spain	6858	1795	126570	3210	18	81	203	24	60	106	618	CORN, COTP, CSIL, DWHT, FALW, FLAX, FPEA, OATS, POTA, RICE, SBAR, SGBT, SUNF, WPAS, WRYE, WWHT
FI	Finland	538	0	19326	1000	36	81	214	13	34	59	260	FALW, FPEA, OATS, POTA, RAPE, SBAR, SGBT, WPAS, WRYE, WWHT
FR	France	5163	91	142815	3021	28	82	156	15	26	57	294	CORN, CSIL, DWHT, FALW, FLAX, FPEA, OATS, POTA, RAPE, RICE, SBAR, SGBT, SOYB, SUNF, WPAS, WRYE, WWHT
GR	Greece	1700	228	18899	458	11	76	208	19	51	73	436	CORN, COTP, DWHT, FALW, FLAX, FPEA, OATS, POTA, RICE, SBAR, SGBT, SUNF, WPAS, WRYE, WWHT
HU	Hungary	763	0	51959	2316	68	35	70	6	13	22	115	CORN, CSIL, FALW, FPEA, OATS, POTA, RAPE, SBAR, SGBT, SOYB, SUNF, WPAS, WRYE, WWHT
IE	Ireland	175	0	3269	526	19	108	246	15	31	43	196	OATS, POTA, SBAR, SGBT, WWHT
IT	Italy	4677	294	74477	1572	16	57	151	15	38	42	193	CORN, CSIL, DWHT, FLAX, FPEA, OATS, POTA, RAPE, RICE, SBAR, SGBT, SOYB, SUNF, WPAS, WRYE, WWHT
LT	Lithuania	230	0	22858	1723	99	30	75	4	11	14	67	FALW, FPEA, OATS, POTA, RAPE, SBAR, SGBT, WPAS, WRYE, WWHT
LU	Luxembourg	65	0	294	38	5	79	174	15	34	92	444	CSIL, FALW, FPEA, OATS, POTA, RAPE, SBAR, WPAS, WWHT
LV	Latvia	160	0	8502	881	53	17	45	4	9	8	40	FALW, OATS, POTA, SBAR, WPAS, WRYE, WWHT

NL	Netherlands	190	0	6650	322	35	165	347	28	61	73	318	CORN, CSIL, FALW, OATS, POTA, RAPE, SBAR, SGBT, WPAS, WRYE, WWHT
PL	Poland	2252	0	135019	2282	60	56	131	13	31	32	151	CORN, CSIL, FALW, FPEA, OATS, POTA, RAPE, SBAR, SGBT, WPAS, WRYE, WWHT
PT	Portugal	958	38	15160	730	16	48	176	15	42	60	472	CORN, CSIL, DWHT, FALW, FPEA, OATS, POTA, RICE, SBAR, SGBT, SUNF, WPAS, WRYE, WWHT
RO	Romania	1778	8	79357	3031	45	38	90	10	25	45	185	CORN, CSIL, FPEA, POTA, RAPE, RICE, SBAR, SGBT, SOYB, SUNF, WRYE, WWHT
SE	Sweden	1247	0	49315	4190	40	31	63	4	9	12	52	FALW, FLAX, FPEA, OATS, POTA, RAPE, SBAR, SGBT, WPAS, WRYE, WWHT
SI	Slovenia	139	3	1135	113	8	62	145	16	37	58	276	CORN, CSIL, FPEA, OATS, POTA, RAPE, SBAR, SGBT, WPAS, WWHT
SK	Slovakia	806	0	16747	697	21	35	80	6	15	18	89	CORN, CSIL, FPEA, OATS, POTA, RAPE, SBAR, SGBT, SUNF, WPAS, WRYE, WWHT
UK	United Kingdom	1982	0	50521	1389	25	98	207	14	30	37	160	CSIL, FALW, FPEA, POTA, RAPE, SBAR, SGBT, WPAS, WWHT

\*minimum size is always 1 km<sup>2</sup>, minimum fertilizer application rate always 0 kg/ha

<sup>a</sup>crop acronyms: CORN: corn, COTP: cotton, CSIL: corn silage, DWHT: durum wheat, FALW: fallow, FLAX: flax, FPEA: field pea, OATS: oats, POTA: potato, RAPE: rapeseed, RICE: rice, SBAR: spring barley, SGBT: sugarbeet, SUNF: sunflower, WPAS: pasture, WRYE: winter rye, WWHT: winter wheat

**Table S2.** Use of plant protection products in 2003 in the EU member states\*. Omitted were pesticides such as growth regulators and molluscicides, as they are not simulated in Pest-EPIC.

Country	Item	Crop group	Unit	Herbicides	Insecticides	Fungicides
AT	Dosage used by crop group	Cereals	kg ai/ha	0.5	0	0
AT	Dosage used by crop group	Maize	kg ai/ha	0.8	0	0
AT	Dosage used by crop group	Oil seeds	kg ai/ha	0.9	0	0
AT	Dosage used by crop group	Potatoes	kg ai/ha	0.1	1	2.9
AT	Dosage used by crop group	Sugarbeet	kg ai/ha	1.4	0	0.1
AT	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
BE+LU	Dosage used by crop group	Cereals	kg ai/ha	1.5	0	0.3
BE+LU	Dosage used by crop group	Maize	kg ai/ha	1.4	0	0
BE+LU	Dosage used by crop group	Oil seeds	kg ai/ha	0.4	0	0
BE+LU	Dosage used by crop group	Potatoes	kg ai/ha	3.4	0	15.7
BE+LU	Dosage used by crop group	Sugarbeet	kg ai/ha	1.9	0.6	0
BE+LU	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
CY	Dosage used by crop group	Cereals	kg ai/ha	NA	NA	NA
CY	Dosage used by crop group	Maize	kg ai/ha	NA	NA	NA
CY	Dosage used by crop group	Oil seeds	kg ai/ha	NA	NA	NA
CY	Dosage used by crop group	Potatoes	kg ai/ha	NA	NA	NA
CY	Dosage used by crop group	Sugarbeet	kg ai/ha	NA	NA	NA
CY	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
CZ	Dosage used by crop group	Cereals	kg ai/ha	0.6	0	0
CZ	Dosage used by crop group	Maize	kg ai/ha	1.4	0	0
CZ	Dosage used by crop group	Oil seeds	kg ai/ha	0.5	0.1	0
CZ	Dosage used by crop group	Potatoes	kg ai/ha	0.3	0.3	3.8
CZ	Dosage used by crop group	Sugarbeet	kg ai/ha	2.9	0	0
CZ	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
DE	Dosage used by crop group	Cereals	kg ai/ha	0.9	0	0.1
DE	Dosage used by crop group	Maize	kg ai/ha	0.7	0.1	0
DE	Dosage used by crop group	Oil seeds	kg ai/ha	0.8	0	0.2
DE	Dosage used by crop group	Potatoes	kg ai/ha	1.3	0	3.7
DE	Dosage used by crop group	Sugarbeet	kg ai/ha	1.8	0	0.2
DE	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
DK	Dosage used by crop group	Cereals	kg ai/ha	1	0	0
DK	Dosage used by crop group	Maize	kg ai/ha	0	0	0
DK	Dosage used by crop group	Oil seeds	kg ai/ha	0.1	0	0
DK	Dosage used by crop group	Potatoes	kg ai/ha	0.9	0	9
DK	Dosage used by crop group	Sugarbeet	kg ai/ha	1.2	0	0.1
DK	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
EE	Dosage used by crop group	Cereals	kg ai/ha	NA	NA	NA
EE	Dosage used by crop group	Maize	kg ai/ha	NA	NA	NA
EE	Dosage used by crop group	Oil seeds	kg ai/ha	NA	NA	NA
EE	Dosage used by crop group	Potatoes	kg ai/ha	NA	NA	NA
EE	Dosage used by crop group	Sugarbeet	kg ai/ha	NA	NA	NA
EE	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
EL	Dosage used by crop group	Cereals	kg ai/ha	0.2	0	0
EL	Dosage used by crop group	Maize	kg ai/ha	0.8	0	0
EL	Dosage used by crop group	Oil seeds	kg ai/ha	0	0	0
EL	Dosage used by crop group	Potatoes	kg ai/ha	0.6	1.7	5.6
EL	Dosage used by crop group	Sugarbeet	kg ai/ha	2.1	0	1.2

EL	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
ES	Dosage used by crop group	Cereals	kg ai/ha	0.5	0	0
ES	Dosage used by crop group	Maize	kg ai/ha	1.7	0.1	0
ES	Dosage used by crop group	Oil seeds	kg ai/ha	0	0	0
ES	Dosage used by crop group	Potatoes	kg ai/ha	0	0.3	4.1
ES	Dosage used by crop group	Sugarbeet	kg ai/ha	5.4	0.3	0
ES	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
FI	Dosage used by crop group	Cereals	kg ai/ha	0.4	0	0
FI	Dosage used by crop group	Maize	kg ai/ha	0	0	0
FI	Dosage used by crop group	Oil seeds	kg ai/ha	0.6	0	0
FI	Dosage used by crop group	Potatoes	kg ai/ha	0.3	0	3.4
FI	Dosage used by crop group	Sugarbeet	kg ai/ha	2.6	0	0
FI	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
FR	Dosage used by crop group	Cereals	kg ai/ha	1	0	0.1
FR	Dosage used by crop group	Maize	kg ai/ha	0.9	0.1	0
FR	Dosage used by crop group	Oil seeds	kg ai/ha	1.6	0	0
FR	Dosage used by crop group	Potatoes	kg ai/ha	1.9	0	13.2
FR	Dosage used by crop group	Sugarbeet	kg ai/ha	1.8	0	0
FR	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
HU	Dosage used by crop group	Cereals	kg ai/ha	0.4	0	0
HU	Dosage used by crop group	Maize	kg ai/ha	1	0	0
HU	Dosage used by crop group	Oil seeds	kg ai/ha	0.9	0	0
HU	Dosage used by crop group	Potatoes	kg ai/ha	0.9	0.4	0.7
HU	Dosage used by crop group	Sugarbeet	kg ai/ha	3	0.6	0
HU	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
IE	Dosage used by crop group	Cereals	kg ai/ha	1.6	0	0.5
IE	Dosage used by crop group	Maize	kg ai/ha	0	0	0
IE	Dosage used by crop group	Oil seeds	kg ai/ha	0	0	0
IE	Dosage used by crop group	Potatoes	kg ai/ha	0.9	0	19.4
IE	Dosage used by crop group	Sugarbeet	kg ai/ha	1.6	0	0
IE	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
IT	Dosage used by crop group	Cereals	kg ai/ha	0.4	0	0
IT	Dosage used by crop group	Maize	kg ai/ha	1.1	0	0
IT	Dosage used by crop group	Oil seeds	kg ai/ha	0.3	0	0
IT	Dosage used by crop group	Potatoes	kg ai/ha	1	0.3	1.1
IT	Dosage used by crop group	Sugarbeet	kg ai/ha	2.1	0	0
IT	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
LT	Dosage used by crop group	Cereals	kg ai/ha	0.2	0	0
LT	Dosage used by crop group	Maize	kg ai/ha	0	0	0
LT	Dosage used by crop group	Oil seeds	kg ai/ha	0.2	0	0
LT	Dosage used by crop group	Potatoes	kg ai/ha	0	0	0.4
LT	Dosage used by crop group	Sugarbeet	kg ai/ha	0.2	0	0
LT	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
LV	Dosage used by crop group	Cereals	kg ai/ha	0.2	0	0
LV	Dosage used by crop group	Maize	kg ai/ha	0	0	0
LV	Dosage used by crop group	Oil seeds	kg ai/ha	0	0	0
LV	Dosage used by crop group	Potatoes	kg ai/ha	0	0	0.2
LV	Dosage used by crop group	Sugarbeet	kg ai/ha	0.3	0	0
LV	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
MT	Dosage used by crop group	Cereals	kg ai/ha	NA	NA	NA

MT	Dosage used by crop group	Maize	kg ai/ha	NA	NA	NA
MT	Dosage used by crop group	Oil seeds	kg ai/ha	NA	NA	NA
MT	Dosage used by crop group	Potatoes	kg ai/ha	NA	NA	NA
MT	Dosage used by crop group	Sugarbeet	kg ai/ha	NA	NA	NA
MT	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
NL	Dosage used by crop group	Cereals	kg ai/ha	5.2	0	0.4
NL	Dosage used by crop group	Maize	kg ai/ha	0.9	0	0
NL	Dosage used by crop group	Oil seeds	kg ai/ha	2.1	0	0
NL	Dosage used by crop group	Potatoes	kg ai/ha	0.7	0	9.3
NL	Dosage used by crop group	Sugarbeet	kg ai/ha	2.8	0	0
NL	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
PL	Dosage used by crop group	Cereals	kg ai/ha	0.6	0	0
PL	Dosage used by crop group	Maize	kg ai/ha	0.8	0	0
PL	Dosage used by crop group	Oil seeds	kg ai/ha	0.4	0.2	0.2
PL	Dosage used by crop group	Potatoes	kg ai/ha	0.1	0	0.8
PL	Dosage used by crop group	Sugarbeet	kg ai/ha	2.2	0	0
PL	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
PT	Dosage used by crop group	Cereals	kg ai/ha	0.6	0	0
PT	Dosage used by crop group	Maize	kg ai/ha	1.6	0	0
PT	Dosage used by crop group	Oil seeds	kg ai/ha	0	0	0
PT	Dosage used by crop group	Potatoes	kg ai/ha	0.3	0.3	5.5
PT	Dosage used by crop group	Sugarbeet	kg ai/ha	2.6	0	2.1
PT	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
SE	Dosage used by crop group	Cereals	kg ai/ha	1.2	0	0
SE	Dosage used by crop group	Maize	kg ai/ha	0	0	0
SE	Dosage used by crop group	Oil seeds	kg ai/ha	0.3	0	0
SE	Dosage used by crop group	Potatoes	kg ai/ha	0.3	0	2.8
SE	Dosage used by crop group	Sugarbeet	kg ai/ha	1.5	0	0
SE	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
SI	Dosage used by crop group	Cereals	kg ai/ha	0.6	0	0
SI	Dosage used by crop group	Maize	kg ai/ha	1.1	0	0
SI	Dosage used by crop group	Oil seeds	kg ai/ha	0.1	0	0
SI	Dosage used by crop group	Potatoes	kg ai/ha	0.5	0.1	1.2
SI	Dosage used by crop group	Sugarbeet	kg ai/ha	1.5	0	0
SI	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
SK	Dosage used by crop group	Cereals	kg ai/ha	0.4	0	0.1
SK	Dosage used by crop group	Maize	kg ai/ha	1.5	0	0
SK	Dosage used by crop group	Oil seeds	kg ai/ha	0.7	0.1	0
SK	Dosage used by crop group	Potatoes	kg ai/ha	0.5	0	2.4
SK	Dosage used by crop group	Sugarbeet	kg ai/ha	2.1	0.3	0
SK	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA
UK	Dosage used by crop group	Cereals	kg ai/ha	2.1	0	0
UK	Dosage used by crop group	Maize	kg ai/ha	0	0	0
UK	Dosage used by crop group	Oil seeds	kg ai/ha	0.9	0	0.1
UK	Dosage used by crop group	Potatoes	kg ai/ha	0.7	0	13.5
UK	Dosage used by crop group	Sugarbeet	kg ai/ha	1.9	0.4	0
UK	Dosage used by crop group	Other	kg ai/ha	NA	NA	NA

\*Source: Eurostat. The use of plant protection products in the European Union. Data 1992-2003. Luxembourg: Office for Official Publications of the European Communities; 2007. Report No.: 9279038907.

**Table S3.** Pest submodel parameters for different diseases and insect pests. *DEIP*: efficiency of inoculum in causing disease; *DEIS*: efficiency of inoculum in causing secondary infections; *T<sub>opt</sub>*: optimal temperature; *DRI*: decay rate; *MODU*: disease specific modulator; *MLI*: maximum level of infection; *FUHO*: threshold humidity; damage to LAI: leaf area index; BIOM: aboveground biomass; RUE: radiation use efficiency; RW: root weight.  $k_{mort,T0}$ : insect mortality rate at 0°C; *IBM*: insect-specific biomass. *T<sub>opt</sub>*, *FUHO* and *IBM* were approximated from different values reported in literature; tentative generic values were employed for *DEIP*, *DEIS*, and *DRI* due to a lack of more specific data.

Diseases	<i>DEIP</i> [-]	<i>DEIS</i> [-]	<i>T<sub>opt</sub></i> [°C]	<i>DRI</i> [-]	<i>MODU*</i> [-]	<i>MLI*</i> [-]	<i>FUHO</i> [%]	Damage to
Bacterial leaf blight	1e-05	1e-05	29.5	-0.005	1	0.9	0.7	LAI
Brown rust	1e-05	1e-05	17.5	-0.005	1	0.9	0.75	LAI
Brown spot	1e-05	1e-05	26	-0.005	6.3	0.9	0.9	LAI
Fusarium head blight	1e-05	1e-05	27	-0.005	1.1	0.9	0.9	BIOM
Fusarium stem rot	1e-05	1e-05	27	-0.005	0.07	0.9	0.9	RUE
Powdery mildew	1e-05	1e-05	18.5	-0.005	2.5	0.9	0.95	LAI
Septoria nodorum blotch	1e-05	1e-05	18	-0.005	1	0.9	0.9	LAI
Septoria tritici blotch	1e-05	1e-05	20	-0.005	1.25	0.9	0.9	LAI
Sheath blight	1e-05	1e-05	16.5	-0.005	1	0.9	0.92	RW
Take-All	1e-05	1e-05	16	-0.005	0.1	0.9	0.5	RUE
Yellow rust	1e-05	1e-05	12.5	-0.005	1.5	0.9	0.5	LAI
<i>k<sub>mort,T0</sub></i> <sup>+</sup> [ - ]							<i>IBM</i>	
Insects/Invertebrates							[mg]	
Aphids	-	-	27.5	0.04	1	-	3.05	RUE
Cotton bollworm	-	-	27.5	0.06	1	-	31.3	BIOM
European corn borer	-	-	23	0.04	1	-	35	BIOM
Stem flea beetle	-	-	20.5	0.04	1	-	5	BIOM
Thrips	-	-	26	0.04	1	-	1	RUE
Tobacco budworm	-	-	25	0.04	1	-	140	BIOM
Wire worm	-	-	13	0.04	0.02	-	100	RW

\* adapted from Willocquet, L. et al. *Structure and validation of RICEPEST, a production situation-driven, crop growth model simulating rice yield response to multiple pest injuries for tropical Asia*. Ecological Modelling 153, 247-268, doi:10.1016/S0304-3800(02)00014-5 (2002) and Willocquet, L. et al. *Simulating multiple pest damage in varying winter wheat production situations*. Field Crops Research 107, 12-28, doi:10.1016/j.fcr.2007.12.013 (2008).

+ adapted from Thornley, J. H. & France, J. *Mathematical models in agriculture: Quantitative methods for the plant, animal and ecological sciences*. 2 edn, 928 (CABI, 2007).

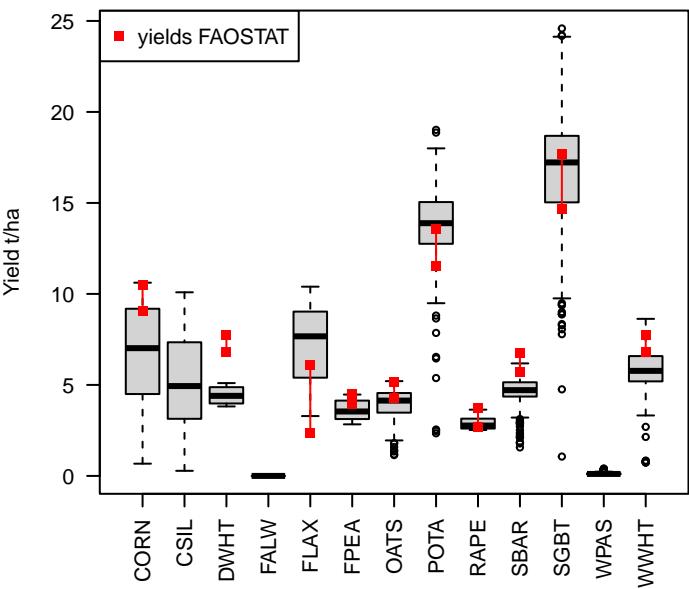
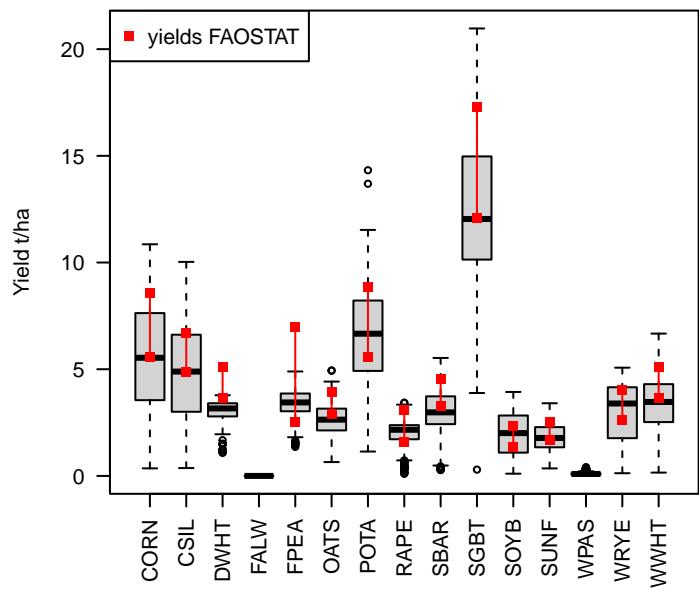
**Table S4.** Annual probability of occurrence of each pest/disease for each host group. The values were calibrated during the calibration procedure.

	Cereals	Cotton	Maize	Oil seeds	Potatoes	Sugar beet	Other
Bacterial leaf blight	0.01	0	0	0	0.4	0.03	0
Brown rust	0.01	0	0	0	0	0	0
Brown spot	0.01	0	0.01	0.03	0	0	0
Fusarium head blight	0.01	0	0	0	0	0	0
Fusarium stem rot	0.01	0	0.01	0	0	0	0
Powdery mildew	0.01	0.03	0.01	0.03	0.4	0.03	0.03
Septoria nodorum blotch	0.01*	0	0	0	0	0	0
Septoria tritici blotch	0.01	0	0	0	0	0	0
Sheath blight	0.01	0	0	0	0	0	0
Take-All	0.01	0	0	0	0	0	0
Yellow rust	0.01	0	0	0	0	0	0
Aphids	0	0	0	0	0	0	0.01
Cotton bollworm	0.01	0.03	0	0	0	0	0.01
European corn borer	0	0	0.01	0	0	0	0
Stem flea beetle	0	0	0	0.008	0	0	0
Thrips	0	0	0	0	0.04	0	0.01
Tobacco budworm	0	0.03	0	0.008	0	0	0.01
Wire worm	0.01	0	0.01	0.008	0.03	0.03	0.01

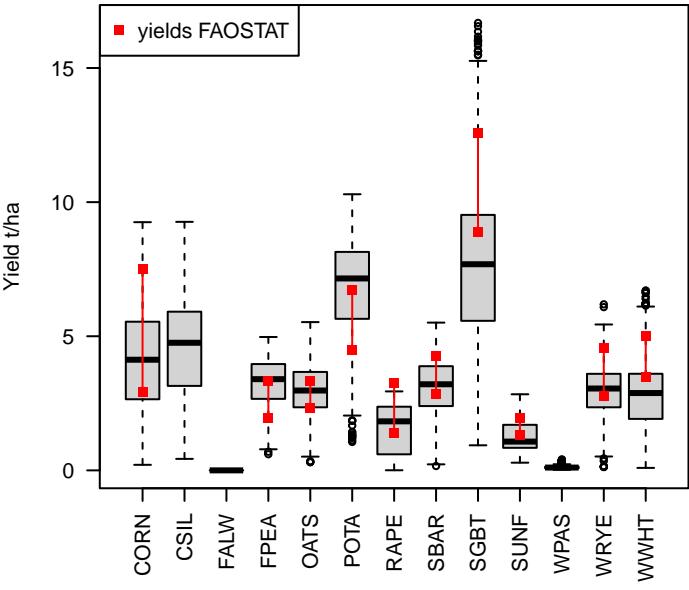
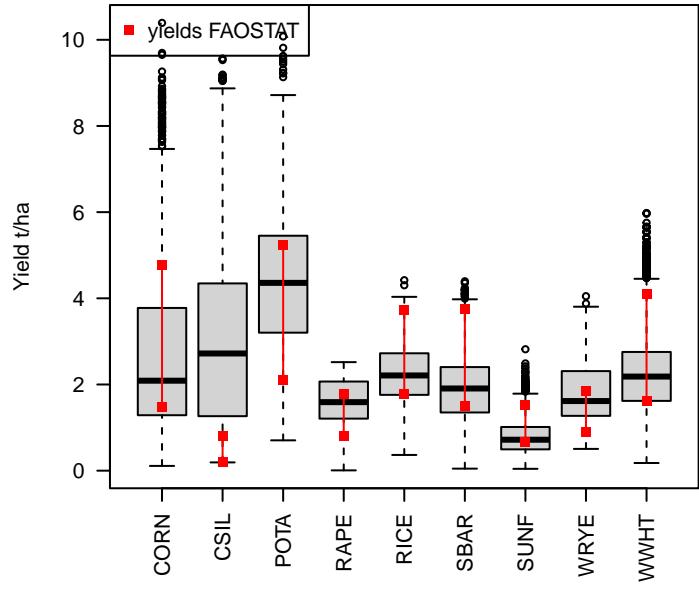
\*0.1 in France

**Fig.S1** Simulated (after calibration) and reported (FAOSTAT) yield distributions by country and crop.

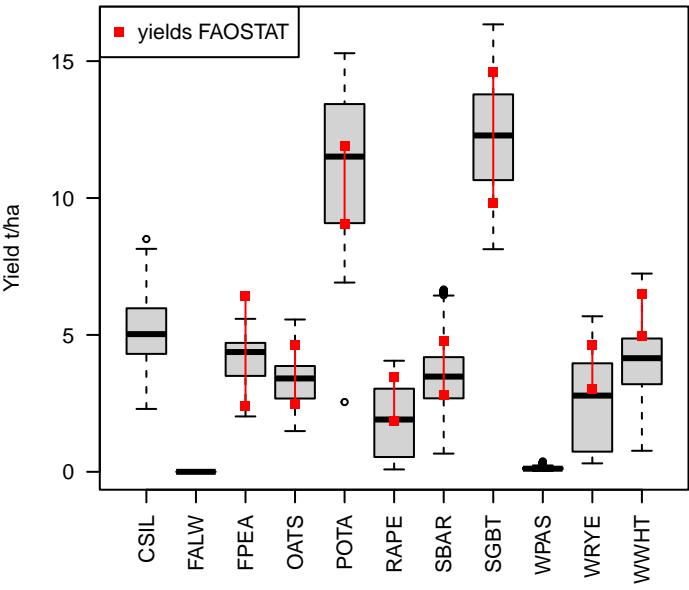
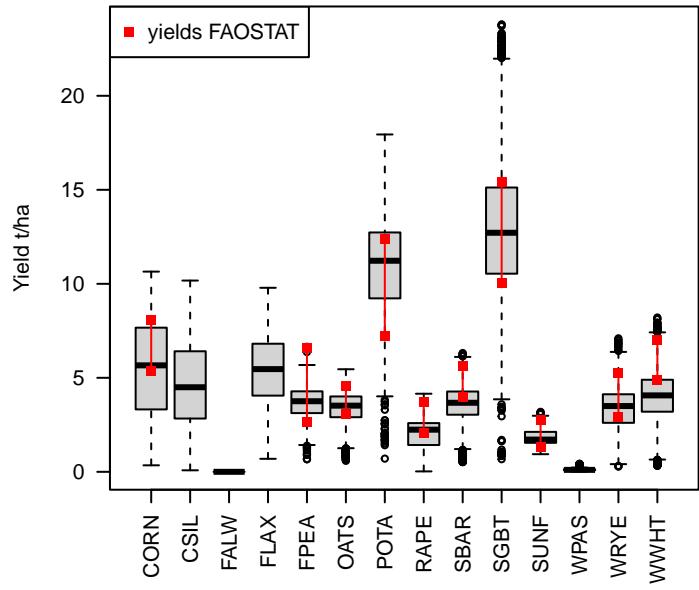
**Austria**

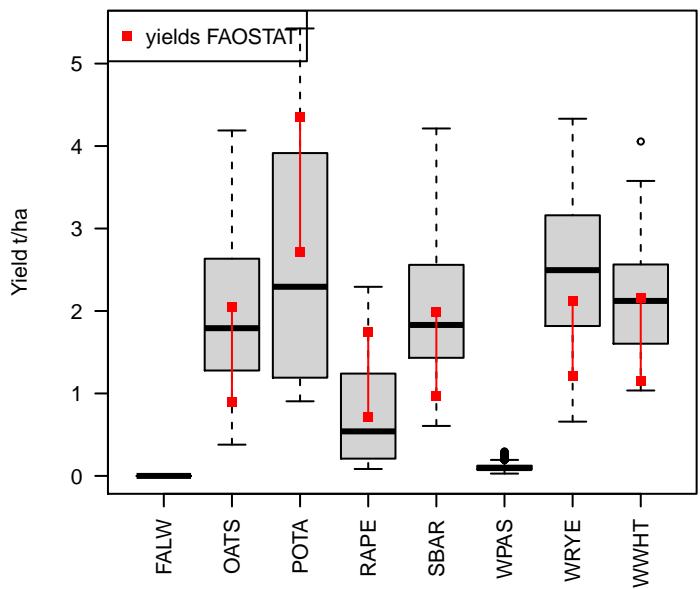
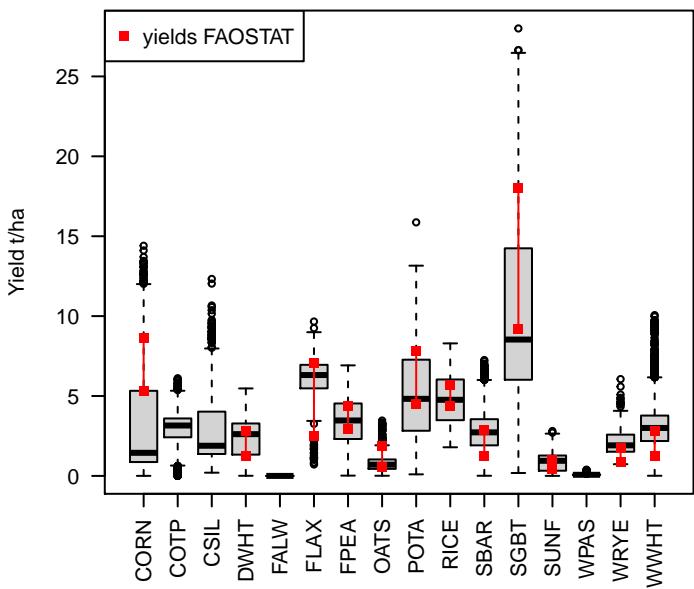
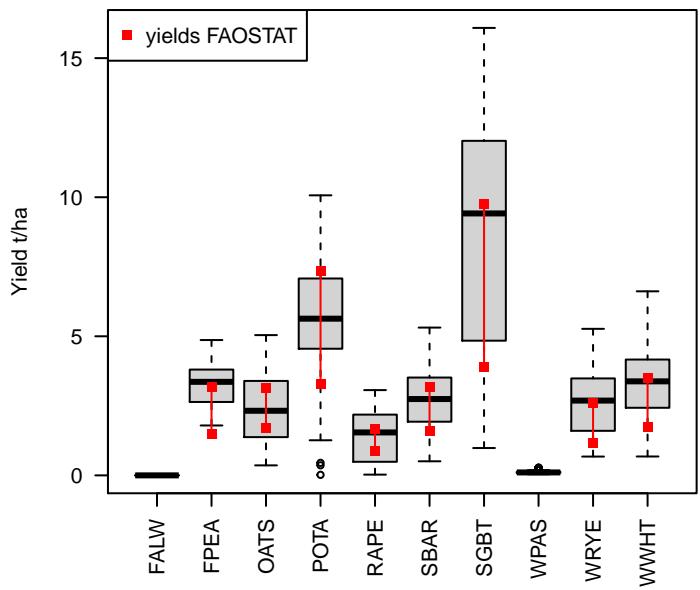
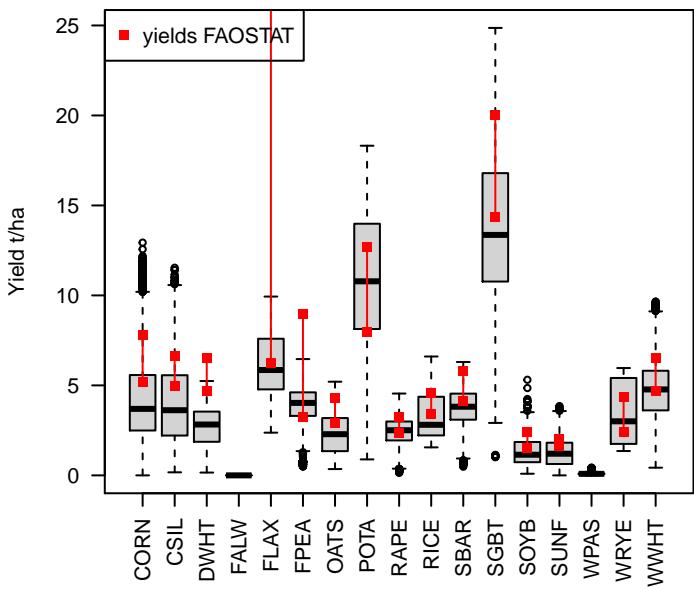
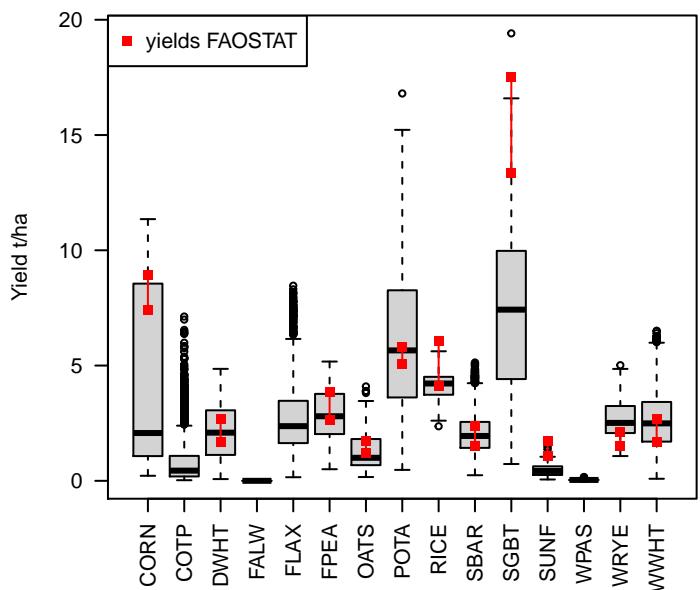
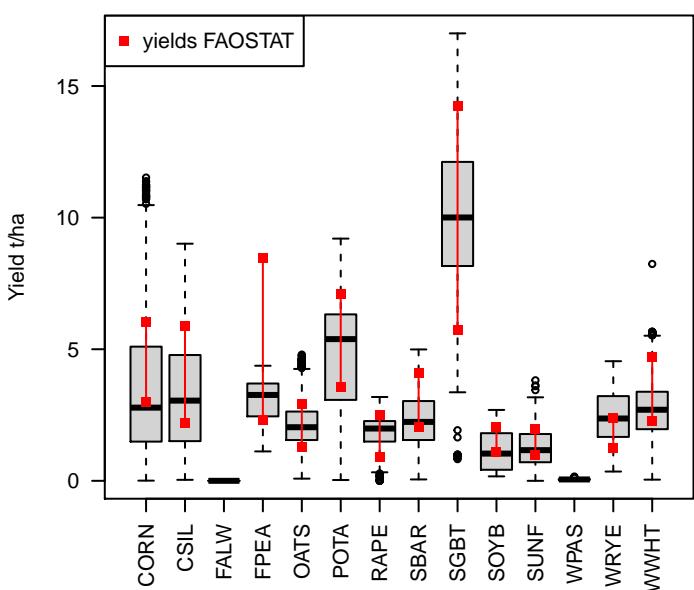


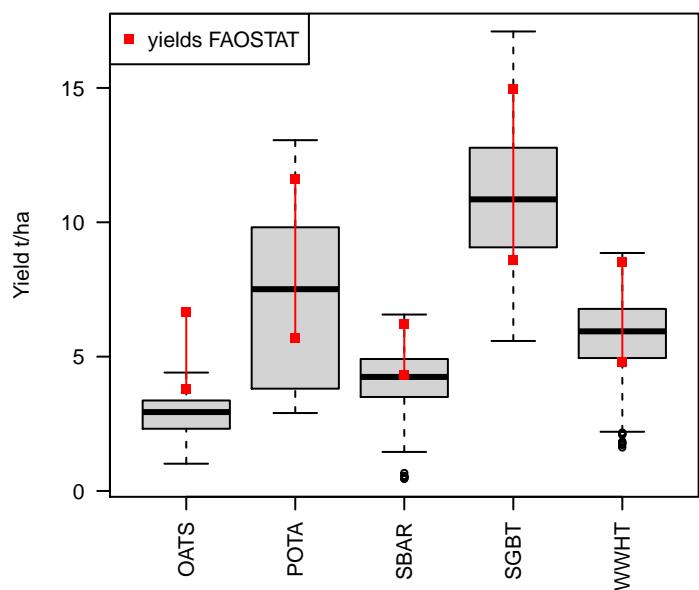
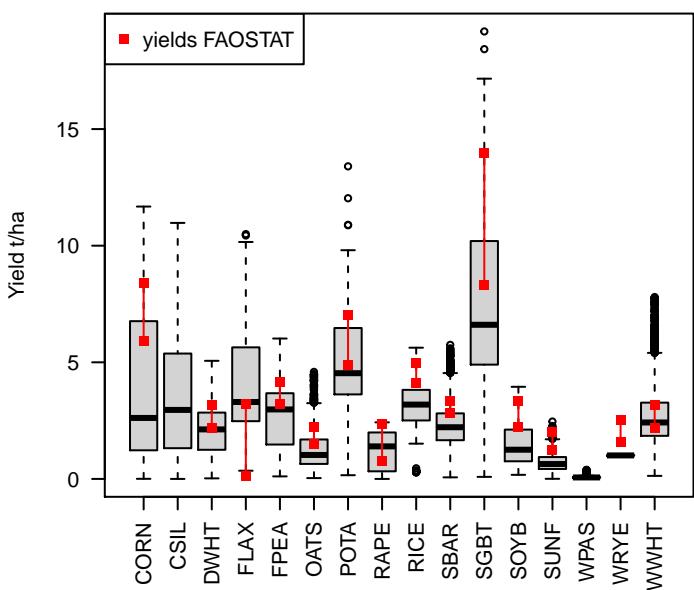
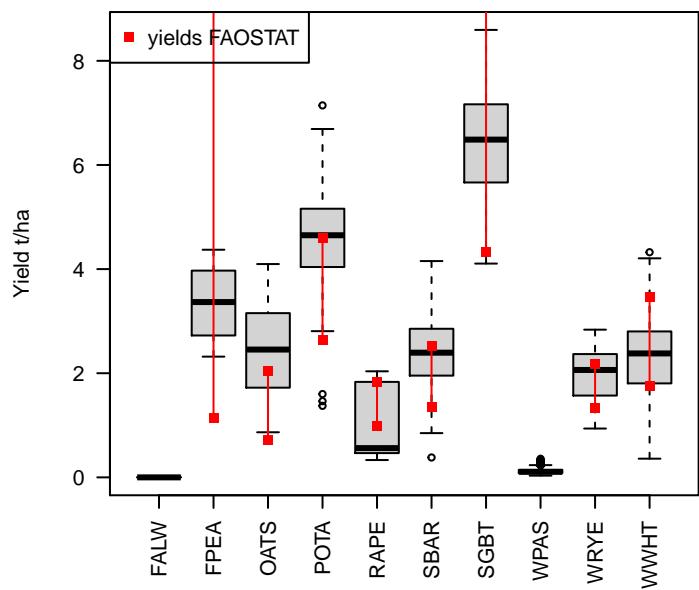
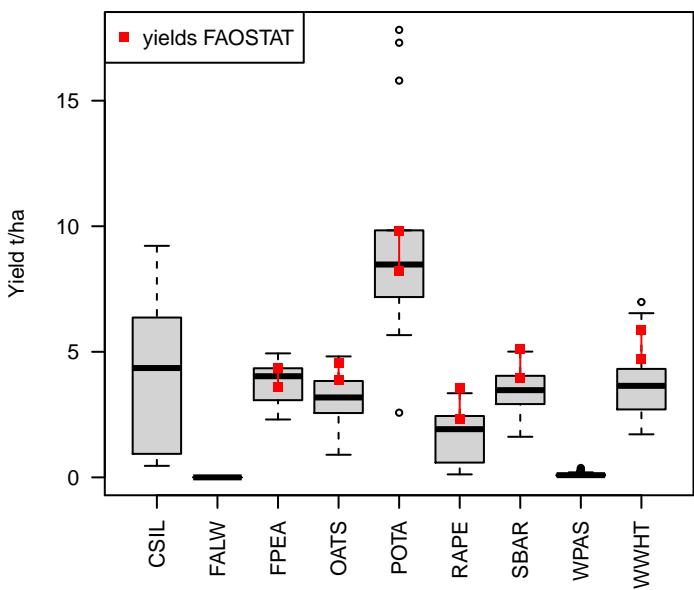
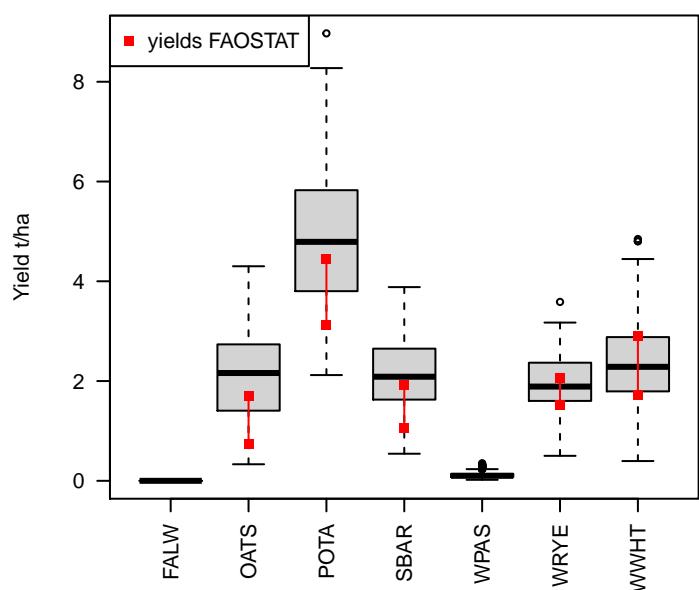
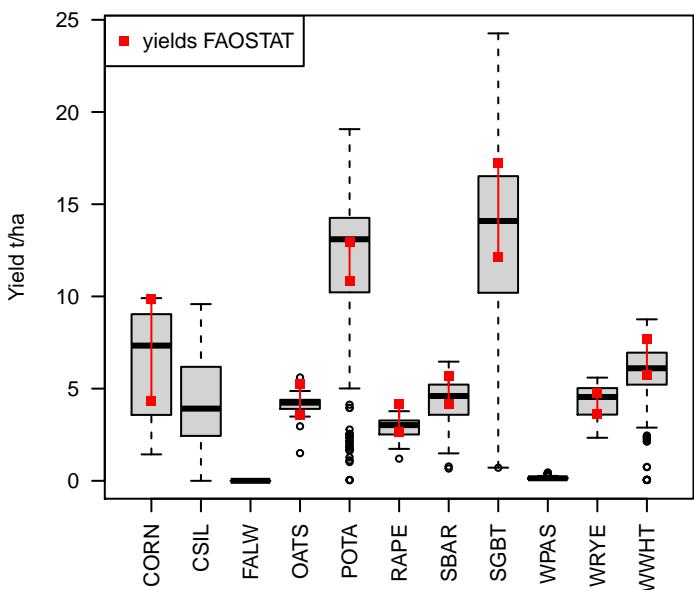
**Bulgaria**

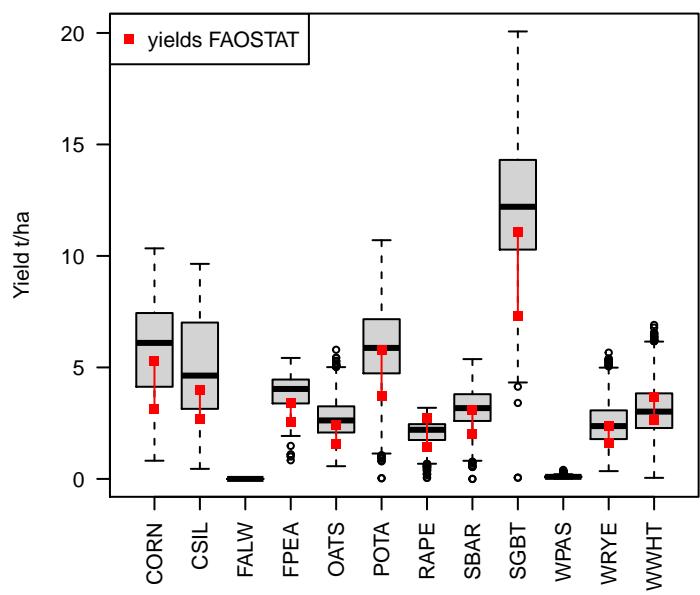
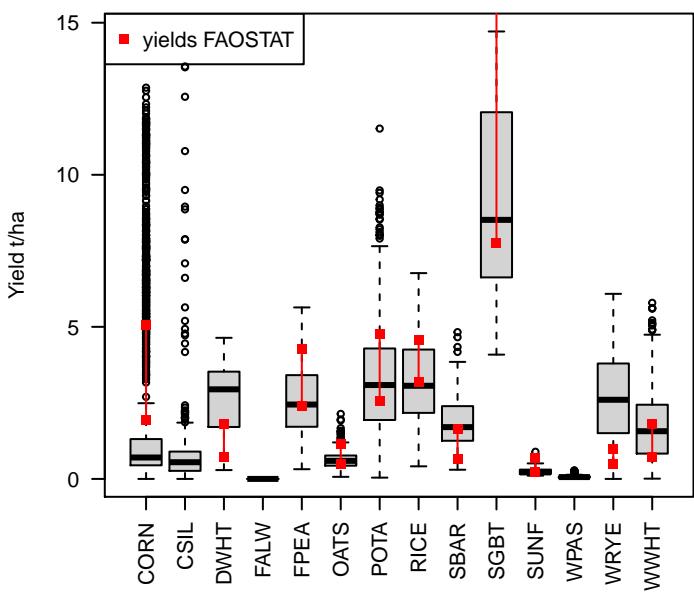
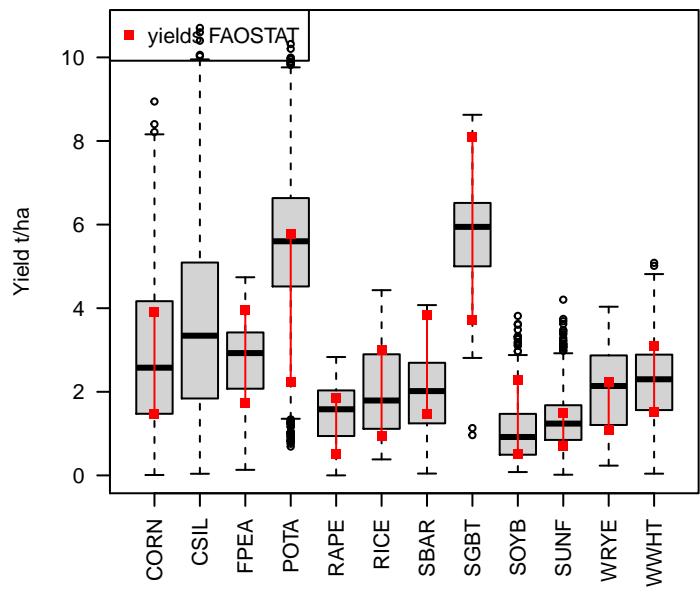
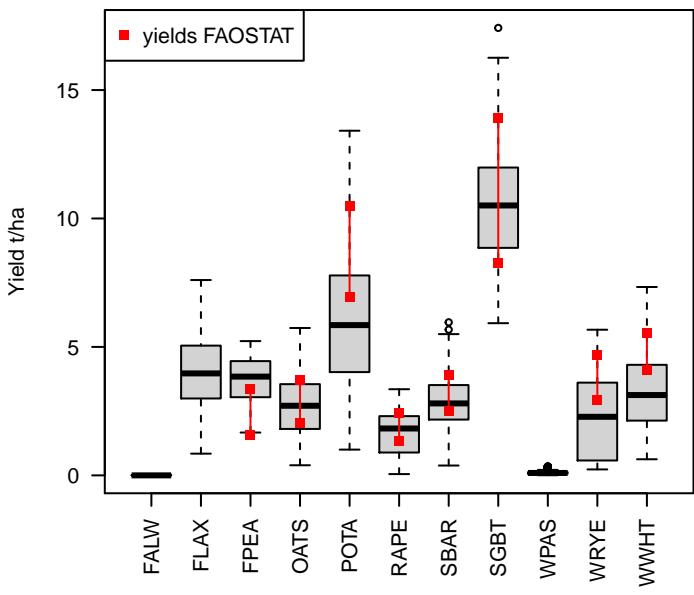
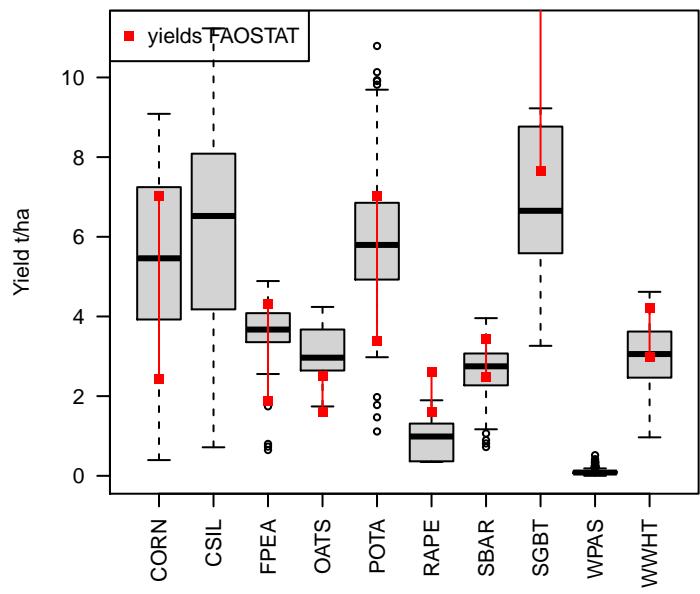
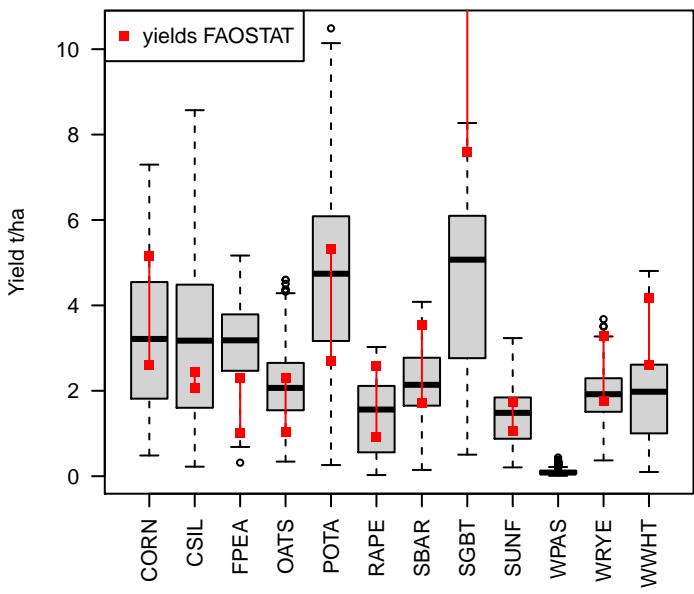


**Germany**



**Estonia****Spain****Finland****France****Greece****Hungary**

**Ireland****Italy****Lithuania****Luxembourg****Latvia****Netherlands**

**Poland****Portugal****Romania****Sweden****Slovenia****Slovakia**

## United Kingdom of Great Britain and Northern Ireland

