

# Regional-Scale Virtual Nitrogen, Phosphorus, and Potassium Factors of Potato Production in China

Xuejuan Fang<sup>1,2,3</sup>, Dongliang Zhong<sup>1,4</sup>, Weijun Zhou<sup>1,4</sup>, Mohammad Jawad Alami<sup>1,2,3</sup>, Shenghui Cui<sup>1,3</sup>, Bing Gao<sup>1,3,\*</sup> and Wei Huang<sup>1,2,3,\*</sup>

- <sup>1</sup> Key Lab of Urban Environment and Health, Institute of Urban Environment, Chinese Academy of Sciences, Xiamen 361021, China; xjfang@iue.ac.cn (X.F.); dlzhong@iue.ac.cn (D.Z.); wjzhou@iue.ac.cn (W.Z.); jawadalami459@gmail.com (M.J.A.); shcui@iue.ac.cn (S.C.)  
<sup>2</sup> University of Chinese Academy of Sciences, Beijing 100049, China  
<sup>3</sup> Xiamen Key Lab of Urban Metabolism, Xiamen 361021, China  
<sup>4</sup> College of JunCao Science and Ecology, Fujian Agriculture and Forestry University, Fuzhou 350002, China  
\* Correspondence: binggao@iue.ac.cn (B.G.); whuang@iue.ac.cn (W.H.)

## Table captions

Table S1. Agronomy inputs, yields, and commodity ratios of potato production system under farmers' convention-

al and optimized measures in different agricultural regions.

Table S2. Manure application amount, N, P and K amount of potato system in different agricultural regions.

Table S3. Seed weight, amount and plant density of potato in different agricultural regions.

Table S4. Contents of N, P and K in different forms of manures.

Table S5. Contents of N, P and K in potato seed.

Table S6. Contents of N, P and K in irrigation water.

Table S7. N and P deposition amounts in different regions.

Table S8. K deposition in different regions (Mean±SD).

Table S9. Crop nutrient uptake (kg) for producing 1 Mg (1 Mg=10<sup>6</sup> g) fresh potato in China.

Table S10. N<sub>2</sub>O emission factors of chemical fertilizers and manures from upland in China.

Table S11. NH<sub>3</sub> volatilization factors of chemical fertilizer and manure from upland in six potato production regions of China.

Table S12. N and P emission factors via runoff, erosion, leaching and denitrification in six potato production regions of China.

**Citation:** Fang, X.; Zhong, D.;

Zhou, W.; Alami, M.J.; Cui, S.;

Gao, B.; Huang, W. Regional-Scale

Virtual Nitrogen, Phosphorus, and

Potassium Factors of Potato

Production in China. *Agronomy* **2023**,

13, x. <https://doi.org/10.3390/xxxxx>

Academic Editor: Hailin

Zhang

Received: 25 August 2023

Revised: 14 September 2023

Accepted: 18 September 2023

Published: 20 September 2023



**Copyright:** © 2023 by the au-

thors. Submitted for possible open

access publication under the terms

and conditions of the Creative Com-

mons Attribution (CC BY) license

([https://creativecommons.org/licenses](https://creativecommons.org/licenses/by/4.0/)

/by/4.0/).

**Table S1.** Agronomy inputs, yields, and commodity ratios of potato production system under farmers' conventional and optimized measures in different agricultural regions (data from our published papers [1,2]).

Region	Measure type	Chemical fertilizer (kg ha <sup>-1</sup> )			Irrigation water (mm yr <sup>-1</sup> )	Pesticides (kg ha <sup>-1</sup> )	Yield (Mg ha <sup>-1</sup> )	Commodity ratio (%)
		N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O				
Northeast China	Conventional	148±11	88±9	176±17	3±3	4±1	32.7±1.6	78.2±2.4
	Optimized	130±7	74±5	149±10	12±7	0	37.7±1.1	83.7±1.5
North China	Conventional	219±15	149±12	185±17	113±21	9±3	29.2±1.4	82.2±2.1
	Optimized	176±13	125±10	165±16	82±14	0	30.9±1.4	86.1±1.8
Northwest China	Conventional	161±4	112±5	105±8	81±16	7±2	28.6±0.8	75.2±1.7
	Optimized	158±5	107±5	111±8	78±12	0	34.6±1.0	82.0±1.2
Central-East China	Conventional	214±12	150±12	201±13	0	6±2	26.5±1.0	76.4±2.0
	Optimized	185±12	127±12	187±13	0	0	30.8±1.6	81.6±1.7
Southwest China	Conventional	180±9	123±9	179±9	18±15	4±1	28.0±1.0	80.3±2.1
	Optimized	176±9	126±9	180±9	13±16	4±1	31.2±1.3	82.6±2.0
Southeast China	Conventional	217±10	149±10	237±19	4±4	5±1	27.9±1.4	86.7±2.0
	Optimized	207±10	137±10	231±14	3±3	0	29.5±1.4	89.5±1.6

Note: values are mean and stand error (SE) (calculated from the 5th to 95th percentiles).

**Table S2.** Manure application amount, N, P and K amount of potato system in different agricultural regions.

Site	Manure Type <sup>#</sup>	Application Amount (t ha <sup>-1</sup> )	N (kg ha <sup>-1</sup> )	P <sub>2</sub> O <sub>5</sub> (kg ha <sup>-1</sup> )	K <sub>2</sub> O (kg ha <sup>-1</sup> )	Reference
<b>Northeast China</b>						
Huludao, Liaoning		0	0	0	0	[3]
Shenyang, Liaoning		0	0	0	0	[4]
Western of Liaoning	FYM	53	121	39	121	[5]
Benxi, Liaoning			0	0	0	[6]
Suizhong, Liaoning	FYM	45	103	33	103	[7]
Harbin, Heilongjiang			0	0	0	[8]
Harbin, Heilongjiang			0	0	0	[9]
Shuihua, Heilongjiang			0	0	0	[10]
Jiamusi, Heilongjiang			0	0	0	[11]
Keshan, Heilongjiang			0	0	0	[12]
Harbin, Heilongjiang	DE	23	99	50	73	[13]
Qiqihaer, Heilongjiang			0	0	0	[14]
Harbin, Heilongjiang			0	0	0	[15]
Harbin, Heilongjiang			0	0	0	[16]
Xiangfang, Heilongjiang			0	0	0	[17]
A'cheng, Heilongjiang			0	0	0	[18]
Hegang, Heilongjiang	OM	38	87	47	87	[19]
Boli, Heilongjiang	OM	38	87	47	87	[20]
Harbin, Heilongjiang			0	0	0	[21]
Shuihua, Heilongjiang	BOF	6	37	22	15	[22]
<b>Mean ± SE*</b>			23±9	10±4	20±9	
<b>North China</b>						
Chengde, Hebei	FYM	45	103	33	103	[23]
Chengde, Hebei	FYM	15	34	11	34	[24]
Luancheng, Hebei	FYM	12	27	9	27	[7]
Zhangbei, Hebei		0	0	0	0	[25]
Longhua, Hebei	FYM	45	103	33	103	[23]
Zhangbei, Hebei	OM	38	84	38	84	[26]
Yanqing, Beijing	FYM	12	27	9	27	[27]
Tongzhou, Beijing		0	0	0	0	[28]
Tai'an, Shandong		0	0	0	0	[29]
Shanxi province		0	0	0	0	[30]
Jiaozhou, Shandong		0	0	0	0	[31]
Zaozhuang, Shandong	FYM	15	34	11	34	[32]
Zoucheng, Shandong		0	0	0	0	[33]

Zibo, Shandong	OM	15	34	19	34	[34]
Zuoyun, Shanxi	DE	23	115	150	207	[35]
Qinyuan, Shanxi	FYM	38	87	28	87	[36]
Zuoyun, Shanxi	FYM	38	87	28	87	[37]
Xixian, Shanxi	OM	30	60	30	60	[38]
Zhengzhou, Henan	DPOM	20	468	186	322	[39]
Shangqiu, Henan	FYM	4	9	3	9	[40]
Nanyang, Henan	OM	5	11	5	11	[41]
Zhengzhou, Henan	OM	1	2	1	2	[42]
Zhengzhou, Henan		0	0	0	0	[43]
Tongxu/Zhengzhou, Henan	OM	15	33	15	33	[44]
Henan, Shandong, etc.	OM	15	33	15	33	[45]
Mean ± SE			37±8	18±6	36±11	
-----						
Northwest China						
Jining, Inner Mongolia	SM	30	96	70	49	[46]
Siwangziqi, Inner Mongolia	OM	5	11	6	11	[47]
Huhhot, Inner Mongolia		0	0	0	0	[48]
Wuchuan, Inner Mongolia		0	0	0	0	[49]
Wuchuan, Inner Mongolia		0	0	0	0	[50]
Wuchuan, Inner Mongolia		0	0	0	0	[51]
Huhhot, Inner Mongolia	OM	10	22	12	22	[52]
Ulanqab, Inner Mongolia	SM	20	121	84	44	[53]
Wuchuan, Inner Mongolia			143			[54]
Wuchuan, Inner Mongolia			127			[54]
Wuchuan, Inner Mongolia			141			[54]
Wuchuan, Inner Mongolia		0	0	0	0	[55]
Shangdu, Inner Mongolia		0	0	0	0	[56]
Ulanqab, Inner Mongolia			95	29	51	[57]
Ulanqab, Inner Mongolia			35	16	43	[58]
Mid-southern Areas of Ningxia	FYM	5	11	4	11	[59]
Xiji, Ningxia			113	29	61	[60]
Guyuan, Ningxia			98	30	55	[60]
Southern mountain region, Ningxia			111	29	59	[60]
Guyuan, Ningxia	SM	18	114	82	58	[61]
Yanchi, Ningxia	FYM	35	80	26	80	[62]
Guyuan, Ningxia	FYM	23	53	17	53	[63]
Xiji, Ningxia	SM	30	96	70	49	[64]
Longde, Ningxia			0	0	0	[65]
Tongxin, Ningxia			0	0	0	[66]

Haiyuan, Ningxia			0	0	0	[67]
Guyuan, Ningxia			0	0	0	[68]
Xiji, Ningxia			0	0	0	[69]
Weiyuan, Gansu	FYM	5	11	4	11	[70]
Lanzhou, Gansu	FYM	45	103	33	103	[71]
Weiyuan, Gansu	FYM	38	87	28	87	[72]
Dangcang, Gansu	FYM	33	76	24	76	[73]
Gangu, Gansu	FYM	45	103	33	103	[74]
Gaolan, Gansu	CM	45	147	102	78	[75]
Zhangye, Gansu	SM	60	192	139	98	[76]
Yuzhong, Gansu			0	0	0	[77]
Dingxi, Gansu			0	0	0	[78]
Dingxi, Gansu	FYM	15	34	11	34	[79]
Dingxi, Gansu	FYM	35	80	26	80	[80]
Dingxi, Gansu	OM	30	69	37	69	[81]
Zhuanglang, Gansu	FYM	45	103	33	103	[82]
Shandan, Gansu			0	0	0	[83]
Dingxi, Gansu	CM	30	113	25	58	[84]
Huining, Gansu	FYM	45	103	33	103	[85]
Dingxi, Gansu		0	0	0	0	[86]
Zhuanglang, Gansu	FYM	5	11	4	11	[87]
Baiyin, Gansu	OM	45	103	56	103	[88]
Baiyin, Gansu			0	0	0	[89]
Dingxi, Gansu	OM	15	34	19	34	[90]
Dingxi, Gansu	FYM	3	7	2	7	[91]
Zhangye, Gansu			0	0	0	[92]
Baiyin, Gansu			0	0	0	[93]
Dingxi, Gansu	FYM	68	126	50	156	[94]
Dingxi, Gansu	OM	15	75	53	60	[95]
Zhuanglang, Gansu			0	0	0	[96]
Lintao, Gansu			0	0	0	[97]
Huachi, Gansu	SM	30	96	70	49	[98]
Dingxi, Gansu			0	0	0	[99]
Dingxi, Gansu			0	0	0	[100]
Dingxi, Gansu			0	0	0	[101]
Baiyin, Gansu			0	0	0	[102]
Tongwei, Gansu	FYM	45	103	33	103	[103]
Wuwei, Gansu			0	0	0	[104]
Dingxi, Gansu	FYM	45	103	33	103	[105]

Dingxi, Gansu			0	0	0	[106]
Dingxi, Gansu	FYM	30	69	22	69	[107]
Lanzhou, Gansu	FYM	30	69	22	69	[108]
Lanzhou, Gansu			90	0	0	[109]
Tongwei, Gansu			0	0	0	[110]
Dingxi, Gansu			0	0	0	[111]
Dingxi, Gansu			0	0	0	[112]
Ledu, Qinghai			0	0	0	[113]
Haidong, Qinghai			20	10	0	[114]
Datong, Qinghai	OM	75	172	93	172	[115]
Xining, Qinghai			0	0	0	[116]
Datong, Qinghai			0	0	0	[117]
Haixi, Qinghai			0	0	0	[118]
Ledu, Qinghai			10	6	12	[119]
Ledu, Qinghai			0	0	0	[120]
Haixi, Qinghai			0	0	0	[121]
Huzhu, Qinghai			0	0	0	[122]
Haidong, Qinghai			0	0	0	[123]
Huangzhong, Qinghai			0	0	0	[124]
Zhenba, Shaanxi	FYM	26	60	19	60	[125]
Shaanxi			82	53	57	[126]
Chenggu, Shaanxi	PIM	60	126	30	266	[127]
Yangling, Shaanxi			0	0	0	[128]
Jingbian, Shaanxi	FYM	45	103	33	103	[129]
Yuyang, Shaanxi	FYM	45	103	33	103	[129]
Yunlin, Shaanxi			0	0	0	[109]
Yulin, Shaanxi			0	0	0	[130]
Mean ± SE			39±5	14±2	28±4	
-----						
Central-East China						
Enshi, Hubei			0	0	0	[131]
Jingzhou, Hubei	FYM	30	69	22	69	[132]
Huanggang, Hubei	FYM	75	173	55	173	[133]
Chongyang, Hubei			0	0	0	[134]
Wuhan, Hubei	OM	30	69	22	69	[135]
Zhijiang, Hubei	DE	30	129	65	95	[136]
Western of Hubei	OM	30	69	22	69	[137]
Enshi, Hubei			0	0	0	[138]
Xiangyang, Hubei			0	0	0	[139]
Jingzhou, Hubei		0	0	0	0	[140]

Huanggang, Hubei			0	0	0	[141]
Xingshan, Hubei	FYM	30	69	22	69	[142]
Xiangyang, Hubei			0	0	0	[143]
Enshi, Hubei	CM	34	109	77	25	[144]
Lichuan, Hubei	FYM	23	53	29	53	[145]
Wufeng, Hubei			0	0	0	[146]
Xiangyang, Hubei			0	0	0	[147]
Yunmeng, Hubei	POM	15	73	29	51	[148]
Dangyang, Hubei		0	0	0	0	[149]
Changsha, Hunan	PIM	30	181	99	136	[150]
Changsha, Hunan	CA	11	35	25	8	[151]
Changsha, Hunan			0	0	0	[152]
Changsha, Hunan			0	0	0	[153]
Changsha, Hunan			0	0	0	[154]
Zhuzhou, Hunan	CM	23	74	52	17	[155]
Cili, Hunan	FYM	23	53	29	53	[156]
Yiyang, Hunan			0	0	0	[157]
Red soil region, Jiangxi	DPOM	5	117	46	81	[158]
Hukou, Jiangxi			0	0	0	[159]
Pengze, Jiangxi	CA	0.8	5	3	1	[160]
Jiujiang, Jiangxi	OM	38	87	46	87	[161]
Ji'an, Jiangxi	OM	23	53	28	53	[162]
Jiujiang, Jiangxi		0	0	0	0	[163]
Nancang, Jiangxi		0	0	0	0	[164]
Jingning, Zhejiang	OM	30	69	37	69	[165]
Songyang, Zhejiang		0	0	0	0	[166]
Cangnan, Zhejiang	PIM	30	38	15	50	[167]
Shuiyun, Zhejiang	FYM	10	23	7	23	[168]
Lishui, Zhejiang	FYM	10	23	7	23	[169]
Central Zhejiang	OM	15	34	19	34	[170]
Jinhua, Zhejiang	POM	8	39	15	26	[171]
Jinhua, Zhejiang	POM, PIM	8, 23	79	32	47	[172]
Lanxi, Zhejiang	OM	20	46	25	46	[102]
Ningbo, Zhejiang	SM	35	45	2	10	[173]
Jinhua, Zhejiang	OM	15	34	19	34	[174]
Jinhua, Zhejiang		0	0	0	0	[175]
Lanxi, Zhejiang			0	0	0	[176]
Taizhou, Zhejiang		0	0	0	0	[177]
Jianghuai Region, Anhui		0	0	0	0	[178]

Funan, Anhui	COF	1	17	53	8.3	[179]
Jieshou, Anhui	FYM, COF	1.2, 4	110	260	78	[179]
Huaiyuan, Anhui	FYM, COF	7, 4	103	278	83	[179]
Shucheng, Anhui	FYM, COF	14, 0.4	85	141	124	[179]
Linquan, Anhui	COF	0.5	12	26	4	[179]
Mengcheng, Anhui	FYM, COF	4, 0.3	46	68	48	[179]
Lixiahe, Jiangsu	OM	53	121	66	121	[180]
Taicang, Jiangsu			0	0	0	[181]
Ganyu, Jiangsu	FYM	99	227	73	227	[182]
Yancheng, Jiangsu	POM	15	73	29	51	[183]
Siyang, Jiangsu	OM	45	103	56	103	[184]
Xuzhou, Jiangsu	FYM	38	87	28	87	[185]
Yancheng, Jiangsu	PIM	15	26	11	14	[186]
<b>Mean ± SE</b>			41±5	22±3	34±5	
<b>Southwest China</b>						
Weining, Guizhou	OM	18	41	22	41	[187]
Bijie, Guizhou	OM	23	100	31	113	[188]
Guiyang, Guizhou	FYM	23	53	17	53	[189]
Weining, Guizhou	OM	45	225	90	225	[190]
Zunyi, Guizhou	CM	23	74	52	17	[191]
Yuqing, Guizhou	CM	23	74	52	17	[192]
Xicang, Sichuan	OM	11	23	12	23	[193]
Sandu, Guizhou	OM	22	96	30	108	[194]
Yinjiang, Guizhou			0	0	0	[195]
Weining, Guizhou			0	0	0	[196]
Jiangkou, Guizhou	HUE	75	47	8	14	[197]
Weining, Guizhou	OM	18	41	22	41	[198]
Weining, Guizhou	CM	23	137	96	31	[199]
Liuzhitequ, Guizhou	FYM	46	105	34	105	[200]
Zhongshanqu, Guizhou	FYM	53	121	39	121	[200]
Shuicheng, Guizhou	FYM	53	121	39	121	[200]
Panxian, Guizhou	FYM	53	121	39	121	[200]
Qiandongnan, Guizhou			0	0	0	[201]
Weining, Guizhou	OM	23	53	29	53	[202]
Fenggang, Guizhou	CM	21	68	48	15	[203]
Fenggang, Guizhou	CM	25	80	57	18	[203]
Fenggang, Guizhou			11	5	31	[203]
Zunyi, Guizhou			0	0	0	[204]
Weining, Guizhou			0	0	0	[205]



Jinping, Guizhou	DM	23	115	150	207	[206]
Weining, Guizhou		0	0	0	0	[207]
Weining, Guizhou		0	0	0	0	[208]
Tongren, Guizhou	CM	23	74	52	17	[209]
Wuxi, Chongqing	OM	30	69	37	69	[210]
Yongchuan, Chongqing	HM	23	51	12	13	[211]
Daozhen, Chongqing	OM	7	16	8	16	[212]
Pengzhou, Sichuan			0	0	0	[213]
Ya'an, Sichuan	OM	30	69	37	69	[214]
Liangshan, Sichuan			0	0	0	[215]
Wenjiang, Sicchuan			0	0	0	[216]
Tongjiang, Sichuan	FYM	23	53	17	53	[217]
Jintang, Sichuan		0	0	0	0	[218]
Panxi region, Sichuan		0	0	0	0	[219]
Liangshan, Yunnan			0	0	0	[220]
Songming, Yunnan	FYM	38	89	29	89	[221]
Luxi, Yunnan			0	0	0	[222]
Zhanyi, Yunnan			0	0	0	[223]
Yuxi, Yunnan	FYM	26	60	19	60	[224]
Qiaojia, Yunnan	FYM	23	53	17	53	[225]
Lijiang, Yunnan			0	0	0	[226]
Honghe, Yunnan		0	0	0	0	[227]
Songming, Yunnan			0	0	0	[228]
Dali, etc. Yunnan	FYM	15	34	11	34	[229]
Lijiang, Yunnan	FYM	26	59	19	59	[230]
Lvliang, Yunnan	FYM	30	69	22	69	[231]
Yunnan province			33	13	24	[232]
Lvliang, Yunnan		0	0	0	0	[233]
Zhaotong, Yunnan	FYM	23	52	16	52	[234]
Eryuan, Yunnan	FYM	23	52	16	52	[235]
Gejiu, Yunnan		0	0	0	0	[236]
Gejiu, Yunnan	FYM	15	35	11	35	[237]
Southwest China	FYM	26	59	18	59	[209]
Mean ± SE			42±5	17±2	34±5	
-----						
Southeast China						
Nanning, Guangxi	FYM	15	35	11	35	[238]
Guiping, Guangxi	DPIM	8	44	19	23	[239]
Xingye, Guangxi	FYM	23	53	17	53	[240]
Bobai, Guangxi	FYM	23	53	17	53	[240]

Baise, Guangxi	FYM	23	53	17	53	[240]
Wuming, Guangxi	DPOM	4	94	37	64	[241]
Nanning, Guangxi		0	0	0	0	[242]
Pingle, Guangxi	FYM	23	53	17	53	[243]
Wuming, Guangxi		0	0	0	0	[244]
Nanning, Guangxi		0	0	0	0	[245]
Beiliu, Guangxi	OM	2	5	2	5	[246]
Karst region, Guangxi	HUM	45	138	30	36	[247]
Pubei, Guangxi		0	0	0	0	[248]
Huizhou, Guangdong	POM	2	10	4	7	[249]
Huidong, Guangdong	DPOM	8	35	14	25	[250]
Guangzhou, Guangdong	OM	15	34	11	34	[251]
Enping, Guangdong		0	59	73	71	[252]
Huidong, Guangdong		0	88	79	78	[124]
Shaoguan, Guangdong	OM	4	10	4	10	[14]
Huidong, Guangdong	DPOM	8	35	14	25	[253]
Huaiji, Guangdong		0	0	0	0	[254]
Huidong, Guangdong	POM	9	40	16	28	[255]
Raoping, Guangdong	OM	5	11	5	11	[256]
Guangdong province	POM	9	140	132	73	[257]
Enping, Guangdong		0	0	0	0	[258]
Huidong, Guangdong	POM	9	48	19	34	[259]
Changle, Fujian		0	0	0	0	[260]
Changle, Fujian	POM	15	74	29	52	[261]
Fuding, Fujian	HUM	15	46	10	12	[10]
Fuzhou, Fujian		0	0	0	0	[262]
Xiapu, Fujian		0	0	0	0	[263]
Fu'an, Fujian	OM	2	5	2	5	[264]
Lianjiang, Fujian			0	0	0	[265]
Fuzhou, Fujian		0	0	0	0	[266]
Changle, Fujian		0	0	0	0	[266]
<b>Mean ± SE</b>			29±5	12±3	22±4	

\* Values are mean and stand error (SE) (calculated from the the 5th to 95th percentiles).

# The abbreviations of FYM, DE, OM, SM, CM, DCM, PIM, DPIM, CA, HUM, HUE, POM, DPOM, BOF, COF represent for farmyard manure, destigate manure, oridinary manure (the category of the manure not reported directly in the literature), sheep manure, cattle manure, dry cattle manure, pig manure, dry pig manure, cake, human manure, human excrement, poultry manure, dry poultry manure, bio-organic fertilizer, and commercial organic fertilizer, respectively. The application amount of N, P, and K is calculated with the manure application amount multiplied by its N, P, and K contents shown in Table S4.

**Table S3.** Seed weight, amount and plant density of potato in different agricultural regions.

Site	Seed weight (g seed <sup>-1</sup> )	Density (Plant ha <sup>-1</sup> )	Seed amount (kg ha <sup>-1</sup> )	Reference
<b>Northeast China</b>				
Benxi, Liaoning		66667	2240	[6]
Western Liaoning	23	71250	1603	[5]
Daxinganling, Heilongjiang	25	57142	1429	[267]
Keshan, Heilongjiang		71428	2400	[12]
Harbin, Heilongjiang		47250	1588	[268]
Keshan, Heilongjiang		67500	2268	[14]
Neijiang, Heilongjiang		70000	2352	[269]
Hegang, Heilongjiang		41667	1400	[19]
Heihe, Heilongjiang	40	90900	3636	[270]
Heihe, Heilongjiang	40	121200	4848	[270]
Heihe, Heilongjiang	40	72700	2908	[270]
Qiqihaer, Heilongjiang		69000	2318	[184]
Jimusi, Heilongjiang		40000	1344	[11]
Harbin, Heilongjiang	50	41667	2083	[16]
Xiangfang, Heilongjiang	38	57143	2143	[16]
Baoqing, Heilongjiang	25	75000	1875	[96]
Suihua, Heilongjiang	38	80000	3200	[271]
Suihua, Heilongjiang	38	90000	3600	[271]
Keshan, Heilongjiang	50	45861	2293	[272]
<b>Mean ± SE*</b>	37.1±2.6		2314±166	
<b>North China</b>				
Yanqing, Beijing		64003	2480	[27]
Guyuan, Hebei	50	69450	3473	[273]
Chengde, Hebei		71250	2761	[24]
Zhangbei, Hebei		40000		[26]
Zhangbei, Hebei		30785		[25]
Qinzhou, Shanxi		56250	2180	[274]
Linxian, Shanxi	25	60606	1500	[275]
Zuoyun, Shanxi	25	54000	1350	[37]
Xixian, Shanxi	38	56213	2136	[38]
Tengzhou, Shandong			1500	[276]
Tengzhou, Shandong		89697	3476	[277]
Tai'an, Shandong		66000	2558	[29]
Zoucheng, Shandong		75000	2906	[33]
Jiaozhou, Shandong		61800	2395	[31]
Zibo, Shandong		72000	2790	[34]
Zhengzhou, Henan		83333	2625	[39]

Site	Seed weight (g seed <sup>-1</sup> )	Density (Plant ha <sup>-1</sup> )	Seed amount (kg ha <sup>-1</sup> )	Reference
Zhengzhou, Henan		75000	2363	[278]
Luohe, Henan	25	71428	1786	[279]
Zhengzhou, Henan		75757	2386	[43]
Shangqiu, Henan		101055	3183	[280]
Zhengzhou, Henan		66890	2107	[44]
Luoyang, Henan		66890	2107	[44]
Shangqiu, Henan		66890	2107	[44]
Kaifeng, Henan		66890	2107	[44]
Nanyang, Henan		66890	2107	[44]
Shangqiu, Henan	28	56750	1589	[40]
Zhengzhou, Henan		61538	1938	[42]
Zhengzhou, Henan		61538	1938	[281]
Shandong, Henan, etc.	25			[45]
<b>Mean ± SE</b>	361.8±4.2		2308±105	
<b>Northwest China</b>				
Jining, Inner Mongolia		41667	1615	[46]
Huhhot, Inner Mongolia		67340	2609	[48]
Baerzuoyan, Inner Mongolia		55500	2151	[282]
Wuchuan, InnerMongolia		52500	2034	[49]
Wuchuan, InnerMongolia		55556	2153	[50]
Wuchuan, InnerMongolia		52500	2034	[51]
Huhhot, Inner Mongolia		66667	2583	[52]
Ulanqab, Inner Mongolia		55000	2131	[53]
Wuchuan, Inner Mongolia		80000	3200	[283]
Baotou, Inner Mongolia		60606	2348	[55]
Hulunbuir, Inner Mongolia	55		3200	[284]
Wuchuan, InnerMongolia		56500		[26]
Haiyuan, Ningxia		30300	1163	[285]
Tongxin, Ningxia	37	49260	1800	[66]
Haiyuan, Ningxia	36	49995	1800	[67]
Guyuan, Ningxia		60000	2303	[68]
Yinchuan, Ningxia	34	40018	1380	[69]
Haiyuan, Ningxia	36	50000	1800	[286]
Haiyuan, Ningxia		50025		[287]
Weiyuan, Gansu		80000	3070	[70]
Lanzhou, Gansu	50	83333	4167	[71]
Weiyuan, Gansu		50505	1938	[72]
Dangcang, Gansu	38	66250	2518	[73]
Gangu, Gansu	25	60000	1500	[74]
Gaolan, Gansu	50	62553	3128	[75]

Site	Seed weight (g seed <sup>-1</sup> )	Density (Plant ha <sup>-1</sup> )	Seed amount (kg ha <sup>-1</sup> )	Reference
Huining, Gansu		58350	2239	[288]
Zhangye, Gansu		111000	4260	[76]
Yuzhong, Gansu		49500	1900	[77]
Dingxi, Gansu		57750	2216	[78]
Zhongmu, Gansu		104160	3998	[289]
Dingxi, Gansu			2250	[134]
Dingxi, Gansu		60000	2303	[290]
Minle, Gansu		100005	3838	[291]
Dingxi, Gansu		45465	1745	[81]
Zhuanglang, Gansu		48000	1842	[82]
Dingxi, Gansu		45460	1745	[84]
Dingxi, Gansu		45000	1727	[292]
Shandan, Gansu		100050	3840	[83]
Yuzhong, Gansu		60000	2303	[293]
Huining, Gansu		51948	1994	[85]
Zhangye, Gansu	25	47058	1176	[294]
Dingxi, Gansu		61875	2375	[86]
Zhuanglang, Gansu		60636	2327	[87]
Dingxi, Gansu		58000	2226	[295]
Baiyin, Gansu		82500	3166	[89]
Dingxi, Gansu		55050	2113	[94]
Gangu, Gansu	40	50000	2000	[296]
Zhangye, Gansu	40	83333	3333	[297]
Zhangye, Gansu		72727	2791	[92]
Shandan, Gansu		97500	3742	[298]
Wuwei, Gansu	30	41667	1250	[299]
Huachi, Gansu		50025	1920	[98]
Dingxi, Gansu		52342	2009	[101]
Baiyin, Gansu	70	42000	2940	[102]
Dingxi, Gansu		52910	2031	[100]
Dingxi, Gansu	8	52050	1998	[106]
Dingxi, Gansu		55500	2130	[300]
Lanzhou, Gansu	40	82500	3300	[108]
Dingxi, Gansu		67500	2591	[107]
Shandan, Gansu		97500		[301]
Dingxi, Gansu		57000		[111]
Dingxi, Gansu		52500		[112]
Tongwei, Gansu		55500		[110]
Dingxi, Gansu		57000		[302]
Dingxi, Gansu		60000		[303]

Site	Seed weight (g seed <sup>-1</sup> )	Density (Plant ha <sup>-1</sup> )	Seed amount (kg ha <sup>-1</sup> )	Reference
Dingxi, Gansu		60000		[304]
Tongwei, Gansu		49500		[305]
Ledou, Qinghai		54167	2079	[113]
Dtong, Qinghai	50	88888	4444	[115]
Xinin, Qinghai		41250	1583	[116]
Datong, Qinghai		48000	1842	[117]
Haixi, Qinghai		73500	2821	[118]
Ledu, Qinghai			2250	[120]
Huzhu, Qinghai		39000	1497	[122]
Haidong, Qinghai		40500	1554	[123]
Huangzhong, Qinghai		49500	1900	[124]
Lintao, Shaanxi		37500	1439	[306]
Yangling, Shaanxi		70000	2687	[128]
Zhenba, Shaanxi	30			[125]
Yulin, Shaanxi		57000	2188	[109]
Yulin, Shaanxi		48000		[130]
Yulin, Shaanxi		45000		[307]
Baicheng, Xinjiang			2250	[308]
<b>Mean ± SE</b>	38.5±2.3		2317±81	
<b>Central-East China</b>				
Enshi, Hubei		60150		[131]
Jingzhou, Hubei		75757	2386	[132]
Liuyang, Hunan		74627	2351	[309]
Huanggang, Hubei	38	67500	2565	[133]
Congyang, Hubei		58500	1843	[134]
Enshi, Hubei	45	67500	3038	[137]
Wuhan, Hubei		88005	2772	[135]
Zhijiang, Hubei	25	120000	3000	[136]
Enshi, Hubei	45	67500	3038	[144]
Xiangyang, Hubei		85000	2678	[139]
Enshi, Hubei		60606	1909	[138]
Huanggang, Hubei		60060	1892	[141]
Xingshan, Hubei		120000	3780	[142]
Xiangyang, Hubei		85000	2678	[143]
Wuhan, Hubei	30			[310]
Lichuan, Hubei		57000	1796	[311]
Enshi, Hubei			3000	[144]
Yunmeng, Hubei		75705		[312]
Xingyang, Hubei		66000		[147]
Liuyang, Hunan		79500	2504	[313]

Site	Seed weight (g seed <sup>-1</sup> )	Density (Plant ha <sup>-1</sup> )	Seed amount (kg ha <sup>-1</sup> )	Reference
Changsha, Hunan		51300	1616	[150]
Changsha, Hunan	32	68870	2250	[151]
Changsha, Hunan		75000	2363	[314]
Changcha, Hunan		82500	2599	[152]
Changcha, Hunan	25			[315]
Changsha, Hunan	27	82500	2250	[153]
Changsha, Hunan		55500	1748	[154]
Zhuzhou, Hunan		82500	2599	[155]
Cili, Hunan	40	66000	2700	[156]
Changde, Hunan	44	67500	3000	[316]
Red soil region, Jiangxi	30	70000	1688	[158]
Nancang, Jiangxi		78120	2998	[317]
Ganyu, Jiangxi			1031	[182]
Yichun, Jiangxi	35	82500	2750	[318]
Hukou, Jiangxi		60000	1913	[306]
Ji'an, Jiangxi		100000	3188	[162]
Suiyun, Zhejiang		52500	1673	[319]
Jingning, Zhejiang	30	82500	2700	[165]
Cangnan, Zhejiang		36000	1148	[167]
Ninghai, Zhejiang		52500	1673	[320]
Ninghai, Zhejiang	35	67500	2380	[321]
Wenzhou, Zhejiang		94500	3012	[322]
Central Zhejiang	25	60000	1500	[170]
Jinhua, Zhejiang		66667	2125	[174]
Jinhua, Zhejiang		66666	2125	[172]
Lanxi, Zhejiang		48024	1531	[102]
Hangzhou, Zhejiang		67500	2152	[323]
Ningbo, Zhejiang		67500	2152	[323]
Jinhua, Zhejiang		67500	2152	[323]
Wenzhou, Zhejiang		67500	2152	[323]
Sanmen, Zhejiang		67500	2152	[323]
Jinhua, Zhejiang	43	60000	1913	[171]
Lanxi, Zhejiang		102564	3269	[176]
Lixiahe, Jiangsu	30	75000	2391	[180]
Taicang, Jiangsu	40	100050	3189	[181]
Dongtai, Jiangsu		105000	3347	[324]
Yancheng, Jiangsu		66667	2125	[186]
Yancheng, Jiangsu		55556	1771	[183]
Siyang, Jiangsu	30		2250	[184]
Xuzhou, Jiangsu	25	60000	1913	[185]

Site	Seed weight (g seed <sup>-1</sup> )	Density (Plant ha <sup>-1</sup> )	Seed amount (kg ha <sup>-1</sup> )	Reference
Central and South Mountain area		45000	1434	[322]
<b>Mean ± SE</b>	33.4±1.5		2323±68	
<b>Southwest China</b>				
Guiyang, Guizhou		75000	2067	[220]
Guiyang, Guizhou		119700	1705	[189]
Yuqing, Guizhou		86667	2728	[192]
Liuyanshui, Guizhou		59550	2160	[325]
Yuling, Guizhou	30	112500	1279	[240]
Wuzhou, Guizhou	30	112500	1624	[240]
Baise, Guizhou	30	112500	2728	[240]
Zunyi, Guizhou		75000	2030	[191]
Qinglong, Guizhou		60606	2455	[326]
Weining, Guizhou		50000	3375	[327]
Weining, Guizhou		59524	1849	[328]
Bijie, Guizhou		63338	2558	[322]
Jiangkou, Guizhou		72000	1876	[197]
Weining, Guizhou		80000	2250	[199]
Weining, Guizhou		60000	2303	[198]
Liuzhitequ, Guizhou		50000	2273	[200]
Zhongshanqu, Guizhou		60000	1750	[200]
Qiandongnan, Guizhou		66667	2006	[201]
Zunyi, Guizhou		60000	2274	[204]
Sandu, Guizhou		67500	1819	[329]
Qiannanzhou, Guizhou		58815	2363	[330]
Jinping, Guizhou		86205	2177	[206]
Weining, Guizhou		60000	2160	[207]
Wuxi, Chongqing		37500	2728	[210]
Beibei, Chongqing	33	60000	2940	[331]
Shizhu, Chongqing		60000	2593	[332]
Yongchuan, Chongqing		72000	2046	[211]
Daozhen, Chongqing		80000	1800	[212]
Ya'an, Sichuan		102564	2558	[333]
Pengzhou, Sichuan		79995	3375	[213]
Ya'an, Sichuan		80000	2046	[214]
Mianning, Sichuan		54210		[334]
Laingshan, Sichuan		55020	3546	[215]
Xuanhan, Sichuan	33		2046	[214]
Chengdu, Sichuan	35	100000	1388	[216]
Liangshan, Sichuan		52500	2353	[335]



Site	Seed weight (g seed <sup>-1</sup> )	Density (Plant ha <sup>-1</sup> )	Seed amount (kg ha <sup>-1</sup> )	Reference
Panxi region, Sichuan	40	60000	2400	[219]
Liangshan, Yunnan		62505	1786	[220]
Songming, Yunnan	50	56250	2302	[221]
Luxi, Yunnan	30	59520	3375	[222]
Songming, Yunnan		47610	1705	[336]
Xuanwei, Yunnan	65	51305	2067	[337]
Yuxi, Yunan	25	104000	3500	[224]
Qujing, Yunnan		60606	1980	[338]
Dali, Yunnan		53333	2455	[339]
Lijiang, Yunnan	45	52500	1790	[226]
Dangbi, Yunnan		66675	1790	[340]
Kunming, Yunnan	25	55500	2046	[341]
Lijiang, Yunnan		52500	3351	[230]
Songming, Yunan		60000	2733	[228]
Baoshan, Yunnan		69000	2046	[342]
Dali, Yunnan		63829	1580	[229]
North Yunnan			1786	[232]
Central Yunnan			1705	[232]
South Yunnan			2728	[232]
Lvliang, Yunnan		46335	2558	[233]
Zhenxiong, Yunnan		60000		[343]
Gejiu, Yunnan		60000		[237]
<b>Mean ± SE</b>	34.6±2.2		2259±74	
<b>Southeast China</b>				
Nanning, Guangxi		55500	1506	[238]
Nanning, Guangxi		66000	1791	[238]
Guiping, Guangxi		60606	1645	[239]
Nanning, Guangxi		125000	3393	[344]
Wuming, Guangxi		66667	1810	[241]
Nanning, Guangxi	25	66667	1810	[242]
Pingle, Guangxi		83333	2262	[243]
Wuming, Guangxi		75000	2036	[244]
Beiliu, Guangxi		80000	2171	[246]
Nanning, Guangxi		100000	2714	[245]
Nanning, Guangxi	43	71250	3034	[247]
Wuming, Guangxi		66667	1810	[345]
Pubei, Guangxi	25	65641	1782	[248]
Huizhou, Guangdong		61538	1670	[249]
Guangdong			1455	[346]
Huidong, Guangdong	25	75000	1875	[250]

Site	Seed weight (g seed <sup>-1</sup> )	Density (Plant ha <sup>-1</sup> )	Seed amount (kg ha <sup>-1</sup> )	Reference
Guangzhou, Guangdong		74882	2033	[251]
Shaoguang, Guangdong		45000	1221	[14]
Huidong, Guangdong		100000	2714	[253]
Huaiji, Guangdong		48015	1303	[347]
Raoping, Gaungdong	25	78750	1969	[256]
Huidong, Guangdong		76923		[259]
Changle, Fujian		57200	1553	[260]
Changle, Fujian		61930	1681	[261]
Dehua, Fujian		52500	1425	[348]
Fuding, Fujian		78420	2129	[10]
Fuzhou, Fujian		67500	1832	[349]
Longhai, Fujian	40	67500	2500	[350]
Longhai, Fujian		90960	2469	[351]
Xiapu, Fujian		60000	1629	[263]
Fuzhou, Lianjiang, Anxi, Fujian	35	82500	2888	[263]
Fu'an, Fujian		67500	1832	[264]
Longhai, Fujian	25	67500	2550	[352]
Changle, Fujian		82815	2248	[353]
Fuzhou, Fujian		60000	1629	[354]
Longyan, Fujian		60060	1630	[355]
Haikou, Hainan	25	76923	2088	[356]
<b>Mean ± SE</b>	<b>29.8±2.5</b>		<b>1973±70</b>	

\* Values are mean and stand error (SE) (calculated from the the 5th to 95th percentiles).

**Table S4.** Contents of N, P and K in different forms of manures.

<b>Category</b>	<b>Water content</b>	<b>N content</b>	<b>P content</b>	<b>K content</b>	<b>Reference</b>
	<b>(%)</b>	<b>(%)</b>	<b>(%)</b>	<b>(%)</b>	
Digestate		0.50	0.65	0.90	[65]
Human manure	80.6	1.16	0.26	0.30	[357]
Human excreta	90.3	0.64	0.11	0.19	[357]
Pig manure	68.7	0.55	0.24	0.29	[357]
Cattle manure	47.3	0.61	0.43	0.14	[200]
Dry cattle manure		1.67	0.43	0.95	[357]
Sheep manure	50.7	0.65	0.47	0.33	[61,357]
Poultry manure	52.3	1.03	0.41	0.72	[357]
Dry poultry manure		2.34	0.93	1.61	[357]
Farmyard manure	54.2	0.50	0.16	0.50	[188,357]
Cake					
Rapeseed cake		6.26	0.35	1.30	[173]
Ordinary manure	54.2	0.50	0.27	0.50	[95,188]
Bio-organic fertilizer	40.3	1.55	0.93	0.60	[22]

**Table S5.** Contents of N, P, and K in potato seed.

Item	Content (%)	Reference
N	0.30	[358]
P <sub>2</sub> O <sub>5</sub>	0.14	[34]
K	0.50	[173]

**Table S6.** Contents of N, P and K in irrigation water [359].

Item	Content (mg/L)
N	2.22±1.21
P <sub>2</sub> O <sub>5</sub>	0.23±0.41
K <sub>2</sub> O	1.19±0.87

**Table S7.** N and P deposition amounts in different regions.

Region	Nitrogen deposition (kg N ha <sup>-1</sup> ·a <sup>-1</sup> )*	P deposition (kg P <sub>2</sub> O <sub>5</sub> ha <sup>-1</sup> ·a <sup>-1</sup> )*
	[359-364]	[116,359]
Northeast China	27.6	1.0
North China	56.2	0.9
Northwest China	18.8	2.2
Central-East China	13.1	1.2
Southwest China	37.8	1.4
Southeast China	41.7	0.7

\* Potato growth period is about 4.5 months per year [365,366].

**Table S8.** K deposition in different regions (Mean±SD) [367,368].

Region	K deposition (kg K <sub>2</sub> O ha <sup>-1</sup> ·a <sup>-1</sup> )*
Northeast China	7.1±2.8
North China	17.6±5.2
Northwest China	8.3±8.8 <sup>†</sup>

Central-East China	7.4±3.3
Southwest China	7.0±0.2
Southeast China	6.6±0.7

\* Potato growth period is about 4.5 months per year.

† Mean value in China because of no direct reported data for this region.

**Table S9.** Crop nutrient uptake (kg) for producing 1 Mg (1 Mg=10<sup>6</sup> g) fresh potato in China.

N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Reference
2.5	1.0	5.3	[182]
5.0	2.0	10.6	[188]
5.5	2.0	12.5	[263]
5.3	-	-	[17]
5.5	1.0	10.2	[369]
5.2	2.3	8.2	[370]
2.9	0.4	3.8	[216]
5.7	1.4	8.1	[216]
5.0	2.0	9.1	[371]
5.0	2.0	9.0	[372]
6.7	2.0	6.0	[204]
5.5	2.0	11.0	[225]
5.1±0.3*	1.7±0.1	8.6±0.7	

\* Values are mean and stand error (SE) (calculated from the 5th to 95th percentiles).

**Table S10.** N<sub>2</sub>O emission factors of chemical fertilizers and manures from upland in China.

Emission source	N <sub>2</sub> O emission factor (%)	Reference
Chemical N fertilizers	1.1	[373]
Manures	0.6	[374]

**Table S11.** NH<sub>3</sub> volatilization factors of chemical fertilizer and manure from upland in six potato production regions of China.

Region	Chemical N fertilizers (%)	Manures (%)
Northeast China	4.8±2.4 [375]	
North China	8.0±2.0 [375]	
Northwest China	4.7±1.7 [375]	10 [376]
Central-East China	9.3±3.9 [375]	

Southwest China	3.3±1.0 [375]
Southeast China	6.6±1.2 [377]

**Table S12.** N and P emission factors via runoff, erosion, leaching and denitrification in six potato production regions of China, calculated from 31 provincial data in Ma et al. (2012) [358].

Region	N emission factors from crop production %				P emission factors from crop production %		
	Runoff <sup>*1</sup>	Erosion <sup>2</sup>	Leaching <sup>3</sup>	Denitrification <sup>4</sup>	Runoff <sup>1</sup>	Erosion <sup>2</sup>	Leaching <sup>3</sup>
Northeast China	8.2±1.9	0.3±0.2	12.5	72.5	0.7±0.2	3.2±1.6	0.4±0.1
North China	4.0±1.5	0.2±0.1	19.8±2.5	65.3±2.6	0.3±0.1	1.3±0.3	0.2±0.1
Northwest China	1.1±0.9	0.2±0.1	11.7±6.5	73.3±6.5	0.1±0.04	1.8±1.1	0.1±0.02
Central-East China	12.2±3.7	0.6±0.2	15.2±3.4	69.8±3.3	1.1±0.3	5.4±1.5	0.5±0.1
Southwest China	22.7±8.7	1.2±0.5	12.5	72.5	2.3±0.9	11.3±4.4	0.9±0.4
South China	11.4±3.6	0.6±0.1	12.5	72.5	1.1±0.3	5.4±1.2	0.5±0.1

\* Values are mean and SD, no SD represents the emission parameter is a constant among different provinces of the corresponding region.

<sup>1</sup> Runoff is calculated by the total input (excluding seeds N,P) multiplying by runoff factor.

<sup>2</sup> Erosion refers to loss of topsoil N, P. Here we use surplus N, P represent topsoil N, P, which calculate by the total input N, P minus crop uptake N, P.

<sup>3</sup> N Leaching is calculated from the N surplus corrected for surface runoff and soil accumulation<sup>#</sup>. P Leaching is calculated from the P surplus.

<sup>#</sup> Soil accumulation of N, P, and K is the net storage of N, P, and K in the topsoil. There is little information about N, P, and K sequestration in soils. Refer to Ma et al [358], we assume that  $N_{\text{Soil accumulation}} = 15\%$  of N surplus corrected for surface runoff,  $P_{\text{Soil accumulation}} = P_{\text{surplus}} - (P_{\text{runoff}} + P_{\text{erosion}} + P_{\text{Leaching}})$ ,  $K_{\text{Soil accumulation}} = K_{\text{surplus}} - K_{\text{Leaching}}$ .

<sup>4</sup> N denitrification is the N loss via denitrification, calculated as N surplus minus runoff, leaching, and soil accumulation N.

## References

- Huang, Y.; Gao, B.; Huang, W.; Wang, L.; Fang, X.; Xu, S.; Cui, S. Producing more potatoes with lower inputs and greenhouse gases emissions by regionalized cooperation in China. *J. Clean. Prod.* **2021**, *299*, doi:10.1016/j.jclepro.2021.126883.
- Gao, B.; Zhong, D.; Fang, X.; Huang, W.; Xu, S.; Cui, S. Virtual new nitrogen, phosphorus, water input, and greenhouse gas emission indicators for the potatoes consumed in China. *Agronomy* **2022**, *12*, doi:10.3390/agronomy12123169.
- Shi, S.; Zhao, Y.; He, Z.; Lou, C. The effect of bio-organic fertilizer with chemical fertilizer on soil nutrient migration and yield of potato. *Jiangsu Agr. Sci.* **2016**, *44*, 154–157. (in Chinese).
- Li, Y.; Lv, D.; Hu, L.; Gu, H.; Qu, L.; Wang, S.; Liu, S.; Chen, J.; Yang, H. Influence of various NPK combinations on agronomic trait, yield and dry matter content in potato. *Chin. Potato J.* **2013**, *27*, 148–152. (in Chinese with English abstract).
- Hou, Y. Cultivation technique of early spring potato mulch in western Liaoning province. *Mod. Agr. Sci. Tech.* **2014**, *9*, 43–44. (in Chinese).
- Zhou, F.; Zhang, Z.; Zhou, J.; Liu, Z.; Jia, L.; Du, J. Effects of different sources and rates of potassium fertilizer on potato yield and quality. *Chinese Potato Journal* **2013**, *27*, 158–161. (in Chinese with English abstract).
- Wang, F.; Kang, Y.; Liu, S. Plastic mulching effects on potato under drip irrigation and furrow irrigation. *Chin. J. Eco-Agr.* **2003**, *11*, 99–102. (in Chinese with English abstract).
- Zhou, H.; Mai, Z.; Wang, X.; Yuan, P.; Jiang, R. Study on special NPK compound fertilizer effect on potato. *Ningxia J. Agri. Fores. Sci. Tech.* **2011**, *52*, 11–13. (in Chinese).
- Liu, X. Effects of N, P, K fertilizers application rate and time on accumulation and distribution of nutrients and dry matter in potato. Northeast Agricultural University, Harbin, 2013.
- Zheng, B.; Zhang, S. Preliminary study on cultivation experiment of potato with different density specifications. *Anhui Agr. Sci. Bul.* **2008**, *14*, 56–58. (in Chinese with English abstract).
- Gu, X.; Ding, J.; Yang, X.; Yao, L.; Gao, X.; Liu, W.; Zhao, H.; Zhang, M. Study on pesticide and fertilizer integration to control disease and yield increasing technology of potato in eastern Heilongjiang province. *Heilongjiang Agr. Sci.* **2018**, *11*, 46–47. (in Chinese).
- Hu, Z. Screening test of several new fungicides against late blight of potato. *Crops* **2010**, *3*, 85–86. (in Chinese).
- Luo, L.; Sun, B.; Zhang, J. Effect of combined application of chemical fertilizer and biogas residue on yield and quality of potatoes. *Heilongjiang Agr. Sci.* **2014**, *7*, 55–57. (in Chinese).
- Ma, C.; Luo, J. Variety comparison study on the potato varieties growth in North-Guangdong. *Guangdong Agr. Sci.* **2011**, *5*, 34–36. (in Chinese with English abstract).
- Gu, X. Study on application effect of straw organic fertilizer. *China Fruit Veg.* **2016**, *36*, 42–44. (in Chinese with English abstract).
- Li, S. Effect of nitrogen on growth yield and nutrient quality of potato. Northeast Agricultural University, Harbin, China, 2017.
- Li, M. Effects of nitrogen management on potato tubers growth and development. Northeast Agricultural University, Harbin, China, 2017.
- Wang, D. Different nitrogen levels on potato growth, yield and verticillium wilt incidence. Northeast Agricultural University, Harbin, China, 2017.
- Song, M.; Zhu, X. Regional experiment on potato varieties in Heilongjiang province. *Mod. Agr. Sci. Tech.* **2015**, *3*, 99–100. (in Chinese).
- Sang, S. Model test and demonstration of improving quality and increasing efficiency of potato organic fertilizer in Boli county. *Mod. Agr. Res.* **2019**, *6*, 45–46. (in Chinese with English abstract).

21. Xu, N.; Zhang, H.; Zhang, R.; Guo, Y.; Xu, Y. Effect of different fertilizers on the yield and dry matter content of potato cultivar Atlantic. *Heilongjiang Agr. Sci.* **2019**, *7*, 66-68. (in Chinese with English abstract).
22. Zhang, L. Effects of phosphorus rate and organic substitution on growth and yield of potato. Northeast Agricultural University, Harbin, China, 2019.
23. Wang, Y.; Feng, K.; Wang, D.; Gai, Y.; Wu, F.; Li, F.; Cao, Y.; Zhao, Y.; Yu, S. Comparison of potato varieties with spring stubble in Chengde cold region of north Hebei province *J. Anhui Agr. Sci.* **2019**, *47*, 49-51. (in Chinese with English abstract).
24. Shang, W.; Xu, Z.; Zhao, L.; Chen, W.; Zhang, C. Effects of various potassium fertilizer application rates on yield, dry matter and starch content of plastic film mulching potato. *Chin. Potato J.* **2016**, *30*, 99-104. (in Chinese with English abstract).
25. Ren, D.; Zhang, L.; Liu, Y.; Liu, K. Effects of plastic film mulching and supplementary irrigation on water use in arid potato field. *Water Conserv. Irr.* **2020**, *4*, 21-26,32. (in Chinese with English abstract).
26. Tang, J.; Xiao, D.; Bai, H. Yield and water use efficiency of potato at different irrigation levels in agro-pastoral ecotone under future climate change. *Transactions CSAE* **2020**, *36*, 103-112. (in Chinese with English abstract).
27. Lin, Y.; Hu, Y.; Zeng, Z. Effect of different water-saving practices on growth and water use of potato. *Agr. Res. Arid Areas* **2010**, *28*, 54-60. (in Chinese with English abstract).
28. Wang, F.; Feng, S.; Hou, X.; Kang, S.; Han, J. Potato growth with and without plastic mulch in two typical regions. *Field Crops Res.* **2009**, *110*, 123 – 129. (in Chinese with English abstract).
29. Liu, F.; Zhuge, Y.; Chen, Z.; Wang, H.; Zhu, L. Effects of controlled-release fertilizer on potato yield, nitrogen use efficiency and economic benefit. *Chin. Agr. Sci. Bull.* **2011**, *27*, 215-219. (in Chinese with English abstract).
30. Han, P.; Zhang, Z.; Zhao, P.; Fang, Y. Investigation and analysis of application of chemical fertilizer and pesticide on potato in Shanxi province. *China Veg.* **2019**, *4*, 73-79. (in Chinese with English abstract).
31. Wu, X.; Zeng, L.; Li, J.; Fang, Z.; Liang, B. Effects of different fertilizer treatments on yield, quality and fertilizer utilization ratio of potato under mulching drip irrigation conditions. *Acta Agr. Boreali-Sinica* **2016**, *31*, 193-198. (in Chinese with English abstract).
32. Li, Z. Study on the technology of soil testing and fertilization in potato production in Zaozhuang city. *Vegetable* **2013**, *11*, 4-6. (in Chinese).
33. Sun, Z.; Zhang, S.; Liu, Y.; Wang, Z. Effects of different fertilizer combinations on yield and quality of potato. *China Fruit Veg.* **2016**, *36*, 29-31. (in Chinese).
34. Yang, P.; Chen, Y.; Gong, F.; Bi, H.; Yue, T.; Gao, M. Effects of different cultivation methods on potato growth and yield composition. *Bull. Agr. Sci. Tech.* **2018**, *4*, 109-115. (in Chinese).
35. Wang, Y.; Yao, C.; Du, P. Effect of organic fertilizer application on potato growth and development. *Agr. Tech. Equip.* **2017**, *12*, 18-19. (in Chinese with English abstract).
36. Li, S.; Wang, S.; Yang, D.; Duan, H.; Wan, G. Performance of introduced new potato variety 'Xingjia 2' and corresponding cultivation techniques. *Chin. Potato J.* **2019**, *33*, 140-145. (in Chinese with English abstract).
37. Feng, J. Potato planting technology and pest control measures in Zuoyun county, Shanxi Province. *Agr. Eng. Tech.* **2018**, *2*, 55. (in Chinese).
38. Zhang, W.; Zhang, B.; Shen, H.; Song, X. Study on potato cultivation density in southwest mountain area of Shanxi Province. *Agr. Sci. Eng. China* **2019**, *6*, 78-80. (in Chinese).
39. Wu, H.; Chen, H.; Guo, Z. Comparison field test on introduced spring potato cultivars. *Chin. Potato J.* **2011**, *25*, 325-328. (in Chinese with English abstract).
40. Zhang, Q.; Chen, K.; Zhao, Y.; He, Z.; Jiang, T.; Qin, W.; Huang, K.; Ji, Q. High yield cultivation techniques of protected potato in early spring in Shangqiu. *Anhui Agricultural Science Bulletin. Anhui Agr. Sci. Bul.* **2017**, *8*, 47-48. (in Chinese).
41. Xu, X.; Li, M.; Xu, Z.; Cao, Z.; Yang, L.; Xu, Q.; Zhou, R.; Lv, S. 2018. Efficient cultivation technology of potato and cotton in Nanyang basin. *China Cotton* **2018**, *45*, 39-41. (in Chinese)



42. Zhang, X.; Chen, H.; Wu, H. Introduction and comparative test of new spring potato cultivars (lines) in Henan province in 2017. *J. Changjiang Veg.* **2018**, *24*, 47-50. (in Chinese with English abstract).
43. Wang, L.; Wang, Q.; Tan, J.; Han, Y.; Liu, H. Influences of dripping fertilizer combined with spraying foliar manure on yield and quality of potato. *Acta Agr. Jiangxi* **2012**, *5*, 121-123. (in Chinese).
44. Huang, P.; Li, C.; Zhang, L.; Li, Z. Regional experiment and study on new potato strain in double cropping area of Henan province. *Mod. Agr. Sci. Tech.* **2014**, *8*, 112-113. (in Chinese).
45. Pang, S.; Fang, G. High yield spring potato cultivation in double potato sowing region of China. *Sci. Cultivation* **2019**, *3*, 18-19. (in Chinese).
46. Mu, J.; Cao, Q.; Gong, J.; Liang, J.; Guo, M. Effects of combined application of N, P, K and organic fertilizers on starch content and yield of potatoes. *Soils* **2009**, *41*, 844-848. (in Chinese with English abstract).
47. Wang, L. Current situation, existing problems and analysis and evaluation of fertilization in Siziwangqi farmers. *Inner Mongolia Agr. Sci. Tech.* **2011**, *2*, 6-10. (in Chinese).
48. Xing, H.; Gao, B.; Liu, M. Effect of K fertilizer ration and film-coverage on K absorption and distribution in potato. *Soil Fert.* **2011**, *25*, 229-233. (in Chinese with English abstract).
49. Wang, Y.; Meng, M.; Chen, Y.; Zhang, J.; Wang, Z.; Cui, C. Effect of different film-covering modes on the yield and soil moisture of dry land tillage potato. *Chin. Agr. Sci. Bull.* **2013**, *29*, 147-152. (in Chinese with English abstract).
50. Zhang, L.; Liu, J.; Xu, S.; Li, Q.; Mi, J.; Liu, B. Effect of plant growth nutrients solution on potato photosynthetic characteristics and yield under different irrigation treatments. *J. Northwest Agr. Forest. Univ. (Nat. Sci. Ed.)* **2013**, *41*, 145-151. (in Chinese with English Abstract)
51. Bao, K. Effect of different film-covering modes and water retention agent on the dry potato growth and soil characteristics. Inner Mongolia Agricultural University, Hohhot, China, 2015.
52. Liu, R.; Yang, J.; Wu, R.; Yang, Y. The effect of limited irrigation on the physiological characteristics of potato. *J. Northern Agr.* **2016**, *44*, 13-17. (in Chinese with English abstract).
53. Mu, J.; Cao, Q.; Liu, S. Effects of combined application of water-retaining agent and nitrogen fertilizer on growth and water and fertilizer utilization of potato. *J. Henan Agr. Sci.* **2016**, *45*, 35-40. (in Chinese with English abstract).
54. Yang, H.; Yang, H.; Sun, G.; Liu, W.; Gao, X.; Huang, S.; Li, Y.; Li, F. Nitrogen balance of water-saving irrigated potato in Northern Yin Mountains. *J. Northern Agri.* **2018**, *46*, 50-56. (in Chinese with English abstract).
55. Han, C.; Huo, Y.; Zhu, D. Effects of different irrigation methods on photosynthetic characteristics and yield of potato. *Water Saving Irrig.* **2018**, *3*, 27-34. (in Chinese with English abstract).
56. Hu, W.; Jin, Z.; Liang, H.; Xue, X.; Gao, X.; Wang, J. Effects of different fertilization methods on the yield and fertilizer ratio of potato. *J. Northern Agr.* **2019**, *47*, 63-67. (in Chinese with English abstract).
57. Jin, Z.; Hu, W.; Liang, H.; Lu, H. Study on the current situation of fertilizer use for potato in Ulanqab. *J. North Agr.* **2019**, *47*, 57-62. (in Chinese with English abstract).
58. Liu, S. Effects of organic fertilizer combined with inorganic fertilizer on growth, yield and quality of potato. *J. Henan Agr. Sci.* **2020**, *49*, 32-39. (in Chinese with English abstract).
59. Jia, Z.; Zhu, Q.; Yang, F. Plastic film mulching cultivation: technology for resource saving water of potato in Mid-Southern areas of Ningxia. *Ningxia J. Agr. Forest Sci. Tech.* **2012**, *53*, 28, 49. (in Chinese with English abstract).
60. Zhang, Z.; Liang, B.; Li, J.; He, H.; Jin, S. Effects of different fertigation methods on yield and nutrient uptake of potato. *Chin. Agr. Sci. Bull.* **2013**, *29*, 268-272. (in Chinese with English abstract).
61. Wang, G.; Xu, F.; Wang, W.; Yu, D.; Wang, W. Effects of N-P-K and organic fertilizers on growth and dry matter accumulation of potato. *Agr. Res. Arid Areas* **2013**, *31*, 106-111. (in Chinese with English abstract).
62. Zhao, J.; Yang, Z.; Ren, Y.; He, J. Studied on cultivation techniques with water-saving and drip irrigation of potato in arid area of central Ningxia. *Liaoning Agr. Sci* **2014**, *3*, 42-45. (in Chinese with English abstract).

63. Xiao, G.; Qiu, Z.; Zhang, F.; Ma, F.; Yao, Y.; Zhang, Q.; Wang, R. Influence of increased temperature on the potato yield and quality in a semiarid district of Northwest China. *Acta Ecologica Sinica* **2015**, *35*, 830-836. (in Chinese with English abstract).
64. Wang, T.; He, J.; He, W.; Wang, Y.; Chen, J. Effect of different fertilization treatment on yield and nutritional and quality of potato. *Southwest J. Agr. Sci.* **2016**, *29*, 2416-2422. (in Chinese with English abstract).
65. Liu, Y. Effect of different dosage of biogas slurry on potato yield. *Qinghai Agro-Tech. Extension* **2016**, *1*, 52-54. (in Chinese).
66. Chen, J.; He, W.; Dai, X.; Wang, Y.; Ma, J. Effects of fertilization on dry matter and nutrient uptake of potato under dry farming system. *Chin. Potato J.* **2016**, *30*, 282-288. (in Chinese with English abstract).
67. Cao, Z. Effect of both nitrogen and potassium fertilizers on yields and quality of potato in rainfed area. Ningxia University, Yinchuan, China, 2017.
68. Ji, J.; Yang, X.; Li, J.; Zhang, G.; Yang, X. Effect of controlled release fertilizer on potato with plastic film mulching in Guyuan city. *Mod. Agr. Sci. Tech.* **2017**, *21*, 71-72. (in Chinese with English abstract).
69. He, Q.; He, W.; He, J.; Wei, C.; Wei, Z. Effects of different film color and fertilizer on potato growth, yield and quality. *Hubei Agr. Sci.* **2018**, 17-22. (in Chinese with English abstract).
70. Cheng, J.; Zhang, X. Study on climatic and ecological effects of potato mulch cultivation in cold and dank area of Weiyuan county. *Chin. Potato J.* **2000**, *14*, 83-85. (in Chinese with English abstract).
71. Tian, Y.; Su, D.; Li, F.; Li, X. Effect of rainwater harvesting with ridge and furrow on yield of potato in semiarid areas *Field Crops Res.* **2003**, *84*, 385-391. (in Chinese with English abstract).
72. Jin, X.; Li, G.; Pan, R. Effect of plastic film mulching on the yield of potato in hilly and humid area of Gansu province. *Chin. Potato J.* **2004**, *18*, 207-210. (in Chinese with English abstract).
73. Zhang, W. Potato sprouting coated precocious high-yielding cultivation techniques in Dangcang county. *Gansu Agr. Sci. Tech.* **2005**, *3*, 33.
74. Gong, Y.; Wang, G.; Zhang, T. Cultivation technology of high starch potato variety zhuangshu No.3 in Gangu county. *Chin. Potato J.* **2007**, *21*, 250-251. (in Chinese with English abstract).
75. Tian, Y.; Li, F.; Liu, X. Effects of different ridge-furrow planting patterns of potato on soil evaporation in semi-arid area. *Chin. J. Appl. Ecol.* **2007**, *18*, 795-800. (in Chinese with English abstract).
76. Zhao, H.; He, X.; Zhang, E.; Xue, L.; Zhang, H.; Wang, D.; Zhang, J. Effect of N and K fertilizer and density on potato yield. *Chin. Potato J.* **2008**, 81-283. (in Chinese with English abstract).
77. Zheng, Y.; Yang, Q. Influence of different mulching mode on the growth and development of potato and soil water content in dry land. *J. Anhui Agr. Sci.* **2008**, *36*, 8462-8464. (in Chinese with English abstract).
78. Li, W.; Li, J.; Zhao, L. Fertilization of potato in drought area based on soil testing. *Chin. Potato J.* **2009**, *23*, 274-276. (in Chinese with English abstract).
79. Gao, S.; Zhang, X.; Wang, Y. Influence of different mulching and furrow-ridge planting methods on soil moisture and yield of potato on dryland. *J. Soil Water Conserv.* **2010**, *24*, 249-256. (in Chinese with English abstract).
80. Zhao, H.; Xiong, Y.; Li, F.; Wang, R.; Qiang, S.; Yao, T.; Mo, F. Plastic film mulch for half growing-season maximized WUE and yield of potato via moisture-temperature improvement in a semi-arid agroecosystem. *Agr. Water Manag.* **2011**, *104*, 68-78. (in Chinese with English abstract).
81. Qin, S.; Zhang, J.; Wang, D.; Pu, Y.; Du, Q. Effects of different film mulch and ridge-furrow cropping patterns on yield formation and water translocation of rain-fed potato. *Chin. J. Appl. Ecol.* **2011**, *22*, 389-394. (in Chinese with English abstract).
82. Liu, X.; He, B.; Kang, E. A study on different modes of plastic mulching of potato in the semi-arid area. *Crops* **2012**, *1*, 115-117. (in Chinese with English abstract).
83. Lu, T.; Zhang, Z.; Ma, J.; Song, J.; Liu, Q.; Zhang, L. A preliminary report on "3414" fertilizer efficiency test of potato in Shandan county. *Gansu Agr. Sci. Tech.* **2013**, *6*, 40-42. (in Chinese with English abstract).

84. Qin, S.; Zhang, J.; Dai, H.; Wang, D.; Li, D. Effect of ridge-furrow and plastic-mulching planting patterns on yield formation and water movement of potato in a semi-arid area. *Agr. Water Manag.* **2013**, *131*, 87-94. (in Chinese with English abstract).
85. Liu, S.; Ren, L.; Li, C. Effects of ridging and mulching on potato in semi-arid region. *Gansu Agr. Sci. Tech.* **2014**, *9*, 36-38. (in Chinese with English abstract).
86. Wang, Y.; Zhang, C.; Qiu, H.; Su, X.; Zhang, J.; Wang, D.; Li, D. Effect of different zinc fertilizer application on dry matter accumulation and yield of potato in rainfed conditions in Gansu province. *J. Gansu Agr. Univ.* **2014**, *49*, 35-40. (in Chinese with English abstract).
87. Zhang, L.; Ma, S. Research on the key technologies of whole plastic-film mulching of potato in loess hilly region. *Agr. Res. Arid Areas* **2014**, *32*, 84-92. (in Chinese with English abstract).
88. Cheng, W.; Liu, X.; Gao, Y.; Zhang, W.; Wang, D.; Qiu, H.; Shen, Q. Effects of organic fertilizer partially replace chemical fertilizer on functional diversity of potato rhizosphere soil microbial community. *Chin. J. Soil Sci.* **2015**, *46*, 1459-1465. (in Chinese with English abstract).
89. Liu, X. The mechanisms of obstacles to continuous potato monoculture and the controlling approaches in Yellow River irrigation areas of Middle Gansu province. Gansu Agricultural University, Lanzhou, China, 2015.
90. Yu, X.; Zhang, X.; Wang, H.; Ma, Y.; Hou, H.; Fang, Y. Effects of fertilizer application on water consumption characteristics and yield of potato cultured under ridge-furrow and whole filed plastic mulching in rain-fed area. *Chin. J. Appl. Ecol.* **2016**, *27*, 883-890. (in Chinese with English abstract).
91. Wang, H.; Zhang, X.; Yu, X.; Ma, Y.; Hou, H. Effect of using black plastic film as mulch on soil temperature and moisture and potato yield. *Acta Ecologica Sinica* **2016**, *36*, 5215-5226. (in Chinese with English abstract).
92. Zhou, J.; Zhou, R. Selection of multi-functional fertilizer formulation and its effects on soil properties and fertilizer profits. *Chin. Potato J.* **2016**, *30*, 349-355. (in Chinese with English abstract).
93. Gao, Y.; Cheng, W.; Zhang, W.; Li, Y.; Shen, B.; Wang, D.; Qiu, H. Effect of organic fertilizer partially replace chemical fertilizer on yield, Nmin's level in soil and N fertilizer efficiency of potato in the yellow river irrigation area of the central in Gansu. *J. Gansu Agr. Univ.* **2016**, *2*, 54-60. (in Chinese with English abstract).
94. Cui, Y. Experimental report on the control of potato late blight by Yuntianli plus fungicide. *Gansu Agr. Sci. Tech.* **2016**, *3*, 32-35. (in Chinese with English abstract).
95. Zhang, X.; Yu, X.; Wang, H.; Hou, H.; Fang, Y.; Ma, Y. Regulations of reduced chemical nitrogen, potassium fertilizer application and organic manure substitution on potato water-fertilizer utilization and biomass assimilation under whole field plastics mulching and ridge-furrow planting system on semi-arid area. *Scientia Agricultura Sinica* **2016**, *49*, 852-864. (in Chinese with English abstract).
96. Xie, Y. Effects of different fertilizing measures on soil nutrients and potato yield. *Chin. Potato J.* **2017**, *31*, 25-29. (in Chinese with English abstract).
97. Zhao, X.; Yang, J.; Feng, S.; Zhang, X. Study on the effect of new types urea on potato in Gansu. *Gansu Agr. Sci. Tech.* **2017**, *7*, 54-57. (in Chinese with English abstract).
98. Liu, C.; Mu, H. Comparative test of new varieties of virus-free potato in Huachi county. *Agr. Sci.-Tech. Inf.* **2017**, *7*, 63-64. (in Chinese with English abstract).
99. Zhang, Y.; Guo, T.; Li, S.; Liu, X.; Zen, G. Effects of different coverage cultivation and balanced fertilization on yield and water use efficiency of potato in the dry-land. *Agr. Res. Arid Areas* **2017**, *35*, 50-54. (in Chinese with English abstract).
100. Tian, S.; Li, S.; Ge, X.; Cheng, J.; Li, M.; Tian, J. Effects of ratio of nitrogen, phosphorus and potassium fertilizer on yield, quality and storability of potato variety 'Xindaping'. *Chin. Potato J.* **2018**, *32*, 155-164. (in Chinese with English abstract).
101. Li, H. Effect of N, P and K fertilizers combined application on the dry matter accumulation and distribution, formation and quality of whole film mulched potato. Gansu Agricultural University, Lanzhou, China, 2018.
102. Liu, H.; Shao, T.; Chen, Z.; Wang, N. Comparative test of spring potato varieties in Lanxi. *Horticulture Seed* **2018**, *38*, 56-57. (in Chinese).

103. Li, X.; Huang, K.; Wang, J.; Xing, Y. Introduction and screening test of new potato varieties in high altitude areas of cool and wet climates in Tongwei county. *Chin. Potato J.* **2018**, *32*, 65-69. (in Chinese with English abstract).
104. Wang, Y.; Sun, X. Effect of fertilization on tuber yield, water and fertilizer use efficiency under different rainfall harvesting planting modes of potato. *Acta Agr. Boreali-occidentalis Sinica* **2018**, *27*, 203-212. (in Chinese with English abstract).
105. Li, X.; Wang, Y. Influence of different planting densities and fertilization levels to the growth and yields of potato with straw mulching in arid crop area. *Soil Water Conserv. China* **2018**, *3*, 43-46. (in Chinese with English abstract).
106. Cao, Z.; Liu, Y.; Zhang, X.; Shen, B.; Qin, S.; Liu, Z.; Wang, L.; Li, C.; Zhang, J. Effects of deficit irrigation on growth, yield and water use of potato plants. *Transactions CSAE* **2019**, *35*, 114-123. (in Chinese with English abstract).
107. Sun, X.; Hu, X.; Lu, L.; Xie, Z.; Zhang, W. Soil physical and chemical properties and microbial characteristics of potato in different continuous cropping years on the Loess Plateau. *Agri. Res. Arid Areas* **2019**, *37*, 184-192. (in Chinese with English abstract).
108. Fang, Y.; Zhang, X.; Yu, X.; Hou, H.; Wang, H.; Ma, Y. Integrated planting technology of potato with water and fertilizer in Gansu province. *Gansu Agr. Sci. Tech.* **2019**, *3*, 87-90. (in Chinese with English abstract).
109. Wang, W.; Zhang, X. Effects of different irrigation methods on carbon balance of potato cropland ecosystem in sandy region of northern Shaanxi. *J. Shanxi Agr. Sci.* **2019**, *47*, 194-199. (in Chinese with English abstract).
110. Ma, J.; Chen, Y.; Cheng, H.; Lan, X.; Li, Y.; Li, R.; Chai, Y.; Chang, L.; Chai, S. Effects of different mulching methods on soil moisture-temperature and tuber yield of potato cultivars with different maturities. *J. Irrig. Drain.* **2020**, *39*, 7-16. (in Chinese with English abstract).
111. Dong, A.; Li, F.; Li, D. Study on the effect of organic fertilizer combined with different new fertilizers on potato in Anding district, Dingxi city. *Mod. Agr. Sci. Tech.* **2020**, *5*, 63-64. (in Chinese).
112. Li, F.; Wang, J.; Li, Y.; Wang, L.; Yao, Y.; Li, D. Experiment on different amount of potato commercial organic fertilizer in dry farming area. *Mod. Agr. Sci. Tech.* **2020**, *10*, 52-53. (in Chinese).
113. Wang, C.; Qu, H. Application effects of different amount of potassium fertilizer on potato in high altitude and arid mountain area. *J. Anhui Agr. Sci.* **2009**, *37*, 2608-2609. (in Chinese with English abstract).
114. Zhu, C.; Li, F.; Yang, W. Survey on nutrient management technique of potato in east Qinghai. *Hubei Agr. Sci.* **2010**, *49*, 3002-3003. (in Chinese with English abstract).
115. Guo, D.; Xue, Y. Cultivation technology of early maturity and high yield of potato with straw and film mulching. *Gansu Agr. Sci. Tech.* **2010**, *11*, 38-39. (in Chinese with English abstract).
116. Ma, J. Temporal and spatial variation of phosphorus balance and solutions to improve phosphorus use efficiency in Chinese arable land. Chinese Academy of Agricultural Sciences, Beijing, China, 2018.
117. Tian, Z.; Zhang, Y.; Zhang, R.; Zhang, X.; Zhang, W.; Han, Y. Rain feed region with high efficiency fertilization on potato in eastern part of Qinghai province. *Guangdong Agr. Sci.* **2012**, *11*, 83-85. (in Chinese with English abstract).
118. Zhang, Y.; Zhang, R. Effect on water use efficiencies and fertilizer utilization rate of potato of different fertilizer treatments under drip irrigation. *Heilongjiang Agr. Sci.* **2014**, *12*, 46-51. (in Chinese with English abstract).
119. Wang, Y. Investigation and analysis of potato fertilizer application in semiarid area of Qinghai province. *Chin. Potato J.* **2014**, *28*, 286-291. (in Chinese with English abstract).
120. Wang, Y.; Li, S.; Zhang, R. Effect of different cropping patterns on potato yield and fertilizer use efficiency. *Acta Agr. Zhejiangensis* **2015**, *27*, 1802-1806. (in Chinese with English abstract).
121. Wan, S.; Wang, L.; Kang, Y.; Liu, S.; Feng, Z. Effects of drip fertigation with saline water on potato growth and water and fertilizer use efficiencies. *J. Irrig. Drain.* **2016**, *35*, 1-7. (in Chinese with English abstract).
122. Jia, H.; Guo, H.; Wang, J. Effect of combined application of nitrogen, phosphorus, potassium fertilizers on fertilizers utilization and yield of potato. *J. Henan Agr. Sci.* **2018**, *47*, 32-36. (in Chinese with English abstract).
123. Qi, X. Comparative analysis of potato fertilizer efficiency in Pingan district, Haidong city. *Agri. Eng. Tech.* **2018**, *10*, 15-16. (in Chinese).

124. Zhang, Y.; Sheng, H.; Zhang, R.; Xu, T.; Nian, G.; Tian, F.; Wang, C.; Li, S. Effects of controlled-release compounded fertilizer on potato yield, soil nitrate-N content and nitrogen use efficiency. *Agri. Res. Arid Areas* **2019**, *36*, 122-129. (in Chinese with English abstract).
125. Shen, K.; Wang, Y.; Li, G. The potentiality and technology of increasing yield of potato under plastic film mulching in mountainous area. *Chin. Potato J.* **2001**, *15*, 169-170. (in Chinese with English abstract).
126. Wang, X.; Tong, Y.; Liu, F.; Zhao, Z. Comments on the situation of fertilization on potato in Shaanxi province. *Plant Nutr. Fert. Sci.* **2013**, *19*, 471-479. (in Chinese with English abstract).
127. Li, X.; Cao, W.; Liu, Q.; Fang, Y.; Liu, Y.; Zhou, Y.; Li, J. 2014b. Effect of different organic fertilizer application amount on the yield of potato. *Mod. Agr. Sci. Tech.* **2014**, *19*, 78-79. (in Chinese).
128. Chen, H. Effect of NPK combination on yield and quality of potato. Northwest A&F University, Shaanxi, China, 2015.
129. Wu, Q.; Fang, Y.; Li, Z. W. 2018a. Introduction performance and high yield cultivation technology of potato cultivar jizhangshu 12 in Yulin city. *Mod. Agr. Sci. Tech.* **2018**, *17*, 69-70. (in Chinese).
130. Fang, Y.; Gao, Q.; Wang, K.; Lv, J.; Zhang, Y. Effects of different irrigation and fertilization methods on potato yield and quality in Yulin sandy land. *Bull. Agr. Sci. Tech.* **2020**, *1*, 93-96. (in Chinese with English abstract).
131. Guo, G.; Dai, Q.; Shen, Y.; Tang, D.; Tian, H. L. 2008. Evaluation on the result of Hubei provincial new potato variety regional trial. *Hubei Agr. Sci.* **2008**, *47*, 1138-1141. (in Chinese with English abstract).
132. Zhang, Y.; Tian, H.; Shen Y.F., D.Q.T., Chen J. Identification the adaptability and productivity of winter and spring potato in Jiangnan plain. *Chin. Potato J.* **2009**, *23*, 332-339. (in Chinese with English abstract).
133. Dai, B.; Li, W.; Lu, H.; Lv, R.; Zhang, D.; Chen, X.; Huang, X. High yield and high efficiency cultivation technology of winter mulch potato in cotton field in Eastern Hubei. *Crops* **2009**, *000*, 97-98. (in Chinese).
134. Wang, S.; Wang, X.; He, Y. Input-output analysis of potato production-A case study of Dingxi, Gansu. *J. Anhui Agr. Sci.* **2010**, *38*, 2081-2083. (in Chinese with English abstract).
135. Gao, G.; Tang, D.; Yang, Y. Study on the growth of solanum tuberosum under different planting density. *Hubei Agr. Sci.* **2011**, 1104-1105. (in Chinese with English abstract).
136. Yu, W.; Yu, G.; Chen, Z.; Liu, K.; Lei, Y.; Liu, Y.; Hu, H.; Qin, J. Effects of different fertilizer modes and levels on rice field plow-free throughout straw covered autumn potato. *Hubei Agr. Sci.* **2011**, *50*, 1114-1116. (in Chinese with English abstract).
137. Zhao, J.; Xie, R.; Zhou, J.; Shu, R. Double high cultivation technique of early maturing potato in mountainous area of western Hubei province. *Mod. Agr. Sci. Tech.* **2011**, *21*, 138-141. (in Chinese).
138. Yin, H.; Wu, C.; Qu, Y.; Li, D. The control efficacy of different fungicides to potato late blight. *Plant Prot.* **2012**, *38*, 179-183. (in Chinese with English abstract).
139. Yang, D. Effect of different fertilizer rates and fertilization methods on yields, nutrients accumulations and tuber quality of potato in Xiangyang. Huazhong Agricultural University, Wuhan, China, 2012.
140. Lei, C.; Zhang, Y.; Yi, G.; He, W.; Liu, D.; Xing, D. Effects of density on main agronomic traits and yield of autumn sowing potato in Jiangnan Plain. *Res. Environ. Yangtze Basin* **2013**, *22*, 1653-1656. (in Chinese with English abstract).
141. Yan, L.; Ge, C.; Xu, L. Preliminary studies on the adaptability of potato cultivars in low plain areas of eastern Hubei. *Hubei Agr. Sci.* **2014**, *53*, 5640-5642. (in Chinese with English abstract).
142. Zhou, Y.; Yuan, F.; Wang, Q.; Peng, D.; Xiong, Z. Experimental study on nitrogen stage control of potato in Xingshan county. *Mod. Agr. Sci. Tech.* **2014**, *22*, 69-71. (in Chinese).
143. Zhang, W.; Yang, D.; Huang, X.; Jiang, L.; Lin, Y.; Lu, M.; Zhao, Z. Effect of nitrogen rate on the yield, quality and economic benefit of potato in Xiangyang city. *Soil Fert. Sci. China* **2016**, *1*, 72-76. (in Chinese with English abstract).
144. Zhao, Q.; Lv, G.; Li, C. Investigation on potato fertilization in Enshi city. *Rural Econ. Sci.-Tech.* **2017**, *28*, 62-63. (in Chinese).
145. Lei, B.; Chen, H.; Zhou, Y. Causes and green prevention and control measures of potato late blight in Lichuan city. *Hubei Plant Prot.* **2017**, *1*, 43-45. (in Chinese).

146. Yan, L.; Zhang, Y.; Gao, J.; Xiao, C.; Wang, Z.; Zhang, D.; Chen, J.; Shen, Y. Evaluation of mid-late maturing table potato new varieties suitable for planting in areas above 700 meters in Hubei province. *Chin. Potatoes* **2019**, *33*, 321-329. (in Chinese with English abstract).
147. Su, X.; Fang, Z.; Zhang, J.; Wen, H.; Zhu, J.; Wang, S.; Li, X.; Wu, S. Effects of different fertilizers on the yield and quality of potato. *Hubei Agr. Sci.* **2019**, *58*, 60-62. (in Chinese with English abstract).
148. Zhang, Y.; Cheng, W.; Shu, J.; Mao, Y. Planting performance of new early maturing potato varieties in Yunmeng, Hubei province. *China Agr. Tech. Extension* **2019**, *35*, 32-34. (in Chinese).
149. Li, M.; Deng, H.; Cao, J.; Zheng, S.; Xu, Y.; Liu, Y.; Li, C. Preliminary report on introduction of New Potato Varieties. *Vegetable* **2020**, 61-64. (in Chinese).
150. Zheng, R. Effects of ratio of fertilizer nitrogen to potassium on growth, yield and quality of potato. *Acta Agriculturae Jiangxi* **2004**, *16*, 39-42. (in Chinese with English abstract).
151. Liu, M.; He, C.; Xiong, X.; Song, Y.; Shen, T. Comparative experiment of spring potato in cultivation method of Changsha. *Chin. Potato J.* **2005**, *19*, 134-137. (in Chinese with English abstract).
152. Song, Y.; Liu, M.; Xiong, X.; Hu, X.; He, C. Influence of seeding date on growth and yields of spring potatoes in Hunan. *Chin. Hortic. Abstract* **2011**, *7*, 16-18. (in Chinese with English abstract).
153. Hu, X.; Liu, M.; He, C.; Song, Y.; Jiang, L.; Xiong, X. Effects of plastic covering methods on the growth and yield of potatoes in winter fallow rice fields in Hunan. *J. Hunan Agr. Univ. (Nat. Sci.)* **2013**, *38*, 500-504. (in Chinese with English abstract).
154. Feng, Y. Studies on the rotation and cultivation systems and nitrogen nutrition of potato in winter fallow fields in South China. Hunan Agricultural University, Changsha, China., 2014.
155. Chen, Z. Effect of fertilization and cultivation patterns on potato plant growth, tuber yield and quality and soil fertility. Hunan Agricultural University, Changsha, China, 2016.
156. Liu, F.; Zhu, F.; Xiang, J.; Xiao, X. Key technology and demonstration of 'medium rice + winter potato' cropping pattern in Cili county. *Hunan Agr. Sci.* **2018**, *9*, 27-28. (in Chinese with English abstract).
157. Zhou, H.; Peng, Y.; Li, T.; Xie, Y.; Tang, L.; Wang, R.; Xiong, X.; Wang, W.; Hu, X. Effects of potato continuous cropping on soil physicochemical and biological properties. *J. Hunan Agr. Univ. (Nat. Sci.)* **2019**, *45*, 611-616. (in Chinese with English abstract).
158. Dai, X.; Wu, J.; Wei, L.; Kang, M.; Dai, Y. Comprehensive cultivation technology of high yield, high efficiency and high quality of potato in red soil area of Jiangxi province. *Acta Agriculturae Jiangxi* **2010**, *22*, 74-76. (in Chinese with English abstract).
159. Chen, A.; Wei, Z.; Sun, X.; Wang, W. Control efficiency of different fungicide combinations on potato late blight. *Chin. Potato J.* **2015**, *29*, 365-367. (in Chinese with English abstract).
160. Jia, Z.; Chen, Y.; Song, T.; Ou, Y.; Zhang, G. High efficient cultivation pattern of continuous cropping of cotton and potato in northern Jiangxi Province. *Cotton Sci.* **2015**, *37*, 60-61. (in Chinese).
161. Zhang, L.; Sun, L.; Liu, X.; Zeng, X.; LeiYang. Screening test of suitable potato varieties for cotton potato continuous cropping in Poyang Lake cotton planting area. *Cotton Sci.* **2017**, *39*, 45-48. (in Chinese).
162. Xiao, Y.; Wang, Z.; Que, Y.; Xu, Y.; Song, X.; Liu, J.; Chen, C. Efficient cultivation technique of winter sowing potato in Ji'an area. *Mod. Agr. Sci. Tech.* **2017**, *21*, 79-80. (in Chinese).
163. Cao, Y.; Wang, W.; Yang, J.; Kuang, X.; Wei, S.; Yang, Z.; Zhang, X.; Li, Y.; Wang, T.; Yang, L. Screening test of suitable potato varieties for main grain production in Northern Jiangxi. *Cotton Sci.* **2017**, *39*, 52-56. (in Chinese).
164. Zheng, S.; Fu, C.; Du, X.; Shi, X.; Lin, L.; Zhang, C.; Hu, S. Preliminary report on contrast experiment of new potato varieties in Nanchang County of Jiangxi Province. *Chin. Agr. Sci. Bull.* **2019**, *35*, 42-46. (in Chinese with English abstract).
165. Wu, S.; Wang, C.; Lin, C. Effect of different sowing date and density of paddy fields tillage straw covering planting on potatoes economic characters. *Chin. Potato J.* **2002**, *16*, 95-96. (in Chinese with English abstract).

166. Xu, Y.; Ye, G.; Xu, S.; Li, J. Effects of potassium application on yield increase of potato in different soils. *Chin. Potato J.* **2002**, *16*, 349-350. (in Chinese with English abstract)
167. Lin, H.; Wu, C. Study on suitable high-yielding cultivation techniques for potato Zhongshu 3 in the medium-low mountains areas of southern Zhejiang. *Chin. Agr. Sci. Bull.* **2008**, *24*, 228-230. (in Chinese with English abstract).
168. Ma, H. Studied the cultivation techniques of potato introduced from the cold northern area to mountainous area at Lishui in Zhejiang. Huazhong Agricultural University, Wuhan, China, 2009.
169. Guo, Z. Effect of phosphorus and potassium fertilizers influence tuber yield and quality and relative physiological process of potato. Huazhong Agricultural Science, Wuhan, China, 2009.
170. Chen, J.; Dian, X.; Zhang, L.; Zhu, P.; R., C. Double high cultivation technique of potato and rice in the hilly and steep area of middle Zhejiang province. *Shanghai Veg.* **2016**, 40-42. (in Chinese).
171. Zhang, L.; Xu, N.; Pan, Z.; Yang, Q.; Li, Y.; Bao, X.; Bai, J.; Li, X.; Sui, Q. Effect of seeding date on the growth stage and yield of potato varieties with different maturity period. *Crop Res.* **2018**, *32*, 198-201. (in Chinese with English abstract).
172. Cheng, L.; Zhang, L.; Dian, X.; Wu, Z.; Wu, L.; Jiang, M.; Qian, Q. Comparison of potato varieties in hilly area of Jinhua city. *Mod. Agr. Sci. Tech.* **2018**, *24*, 80-82. (in Chinese).
173. Wu, Y.; Sun, H.; Ma, Y.; Lian, Y.; Hu, Y.; Fan, H.; Wu, J. Effect of nitrogen fertilizer reduction on yield and quality of potato based on green food standard. *J. Ningbo Univ. (NSEE)* **2018**, *31*, 31-37. (in Chinese).
174. Dian, X.; Shu, S.; Wu, Z.; Cheng, L.; Hu, M.; Zhang, L.; Jiang, M. Effects of different sowing dates on potato yield and its composition in mid-spring of Zhejiang province. *J. Zhejiang Agr. Sci.* **2018**, *59*, 2021-2024. (in Chinese with English abstract).
175. Xue, Z.; Lu, J.; Hong, Y.; Xu, J.; Shi, J.; Hu, G. Effect of different ridge and mulching cultivation, nitrogen and potassium fertilizer combined application on agronomic characteristics and yield of potato. *J. Northeast Agr. Sci.* **2018**, *43*, 9-12. (in Chinese with English abstract).
176. Shao, T.; Ding, J.; Zhou, S.; Jiang, H. New spring potato varieties were planted in central and western Zhejiang. *Bull. Agr. Sci. Tech.* **2019**, *3*, 55-57. (in Chinese with English abstract).
177. Chen, X.; Chen, W.; Liu, S. Comparison of 11 Fresh Potato Varieties in Taizhou. *J. Zhejiang Agri. Sci.* **2019**, *60*, 2226-2227, 2230. (in Chinese).
178. Liao, H.; Dong, L.; Jiang, Q.; Chen, J. Study on screening suitable potato variety for mulching straw in Jianghuai Area in spring. *J. Anhui Agri. Sci.* **2009**, *37*, 5912-5914. (in Chinese with English abstract).
179. Liao, H.; Yan, C.; Wang, Q.; Yang, Y.; Wang, J.; Wu, G.; Tao, Z.; Xu, Z.; Xue, B.; Liu, X.; et al. Investigation on fertilizer utilization status of potato in Anhui. *J. Anhui Agric. Sci.* **2019**, *47*, 154-157. (in Chinese with English abstract).
180. Li, G.; Yang, M.; Feng, B. High efficient three dimensional cultivation technology of greenhouse potato in Lixiahe area Jiangsu province. *Mod. Veg.* **2004**, *11*, 20-21. (in Chinese).
181. Zhang, Q.; Yu, Y.; Lu, Z.; Qiu, F.; Yang, Y.; Feng, J.; Wang, X. High yield green cultivation mode of potato covered with straw in Taihu rice area. *Jiangsu Agr. Sci.* **2006**, *4*, 89-91. (in Chinese with English abstract).
182. Sun, Q.; Gao, J. Potato interplanting early pea cultivation technology in Ganyu county. *Mod. Agr. Sci. Tech.* **2011**, *7*, 118. (in Chinese).
183. Ni, W.; Yang, L.; Li, X.; Ni, H.; Wang, J.; Ma, J. Experiment on single row ridge and film mulching culture of virus-free potato in Yancheng area. *Chin. Horticulture Abstracts* **2016**, *9*, 43-44. (in Chinese).
184. Jiang, X.; Ji, L.; Zhou, C. High yield cultivation technology of spring potato with rice stubble in northern Jiangsu province. *Bull. Agr. Sci. Tech.* **2017**, *11*, 269-270. (in Chinese).
185. Sun, Y.; Zhao, M.; Feng, Y.; Hu, X.; Li, W. Comparison of potato spring cultivars in Jiangsu province. *J. Anhui Agr. Sci.* **2018**, *46*, 45-47. (in Chinese with English abstract).
186. Ni, W. Effects of different cultivation methods on potato growth and yield in coastal areas. *Bull. Agr. Sci. Tech.* **2018**, 85-87. (in Chinese with English abstract).
187. Yin, D.; Cao, W.; Xiao, G.; Yan, X.; Li, Y.; Zhu, Q. Effect of balanced fertilization to potato in high altitude areas of Guizhou province. *Chin. J. Soil Sci.* **2004**, *35*, 48-51. (in Chinese with English abstract).

188. Hu, H.; Yang, B.; Zhang, Y.; Xie, W. Demonstration of balanced fertilization technology for virus-free potato in Bijie area. *Chin. Potato J.* **2005**, *19*, 228-231. (in Chinese with English abstract).
189. Gong, J.; Li, K.; Li, B.; Yang, J. Effect of different cover thickness and density on potato yield. *Guizhou Agr. Sci.* **2005**, *1*, 78-79. (in Chinese).
190. Zheng, Y.; Hu, H.; Pan, G.; Liu, W.; Mao, G.; Lu, J. Study on effect of the potassium provided by organic or chemical fertilizer for virus-free potato. *Soil Fert. Sci. China* **2006**, *1*, 24-27, 62-63. (in Chinese with English abstract).
191. Gou, K.; Huang, C.; Jiang, S.; Yuan, Y. Effects of different sowing date on yield of no-tillage potato with rice stubble. Tillage and Cultivation 5: . *Tillage Cultivation* **2008**, *5*, 43-47. (in Chinese with English abstract).
192. Liang, Z.; Zhang, Q.; Tang, Y. Effects of different sowing dates on yield of no-tillage potato in paddy field. *Mod. Agr. Sci. Tech.* **2008**, *19*, 48-51. (in Chinese).
193. Li, Y.; Yu, X. A preliminary report on the effect of promoting rotting manure on potato yield. *Chin. Potato J.* **2009**, *23*, 98-99. (in Chinese with English abstract).
194. Ping, L.; Pan, L.; Zhu, Z.; Wei, Z.; Luo, X.; Tan, Z. Analysis on application status of farmer households in Sandu county. *Guizhou Agr. Sci.* **2009**, *37*, 107-109. (in Chinese with English abstract).
195. Zhang, X.; Li, X.; Chen, F.; Yuan, A.; Yang, J.; Pu, Y.; Wang, J. Environmental factors influencing quality traits of potato tubers. *Chin. Potato J.* **2010**, *24*, 366-369. (in Chinese with English abstract).
196. Jiu, L.; Sun, R.; He, J.; Qin, S.; Xiao, H.; Zhou, R.; Yuan, L. Effect of different cropping patterns and nitrogenous fertilizer forms on potato yield and quality. *Chin. Potato J.* **2011**, *25*, 36-41. (in Chinese with English abstract).
197. Lu, C.; Wu, C.; Yang, P.; Chen, C. Study on the effect of no-tillage mulch and slow-release fertilizer on detoxifying spring potato. *Mod. Agr. Sci. Tech.* **2013**, *21*, 91-92. (in Chinese).
198. Mo, C.; Liu, H.; Long, L.; Wu, C.; Li, D.; Li, L.; Xiong, Y.; Yu, X. Potato late blight control efficacy of various fungicides. *Chin. Potato J.* **2013**, 52-55. (in Chinese with English abstract).
199. Zhao, H.; Liu, H.; He, G.; Zhou, R.; Xiao, H.; Sun, R.; Gou, J. Effect of different fertilizer combination on potato yield, biological traits and soil fertility. *Guizhou Agr. Sci.* **2013**, *41*, 110-114. (in Chinese with English abstract).
200. Chi, Z.; Fu, X.; Xiao, J.; Wu, H. Precipitation characteristics in potato's growth period and supplementary irrigation analysis in recent 6 years. *J. Guizhou Meteorol.* **2014**, *38*, 1-7. (in Chinese with English abstract).
201. Wu, S.; Yang, J.; S., H.; D., W. Experimental study on the effect of special fertilizer for cultivation of early potato paddy field in Guizhou province. *Bull. Agr. Sci. Tech.* **2015**, *6*, 66-69. (in Chinese with English abstract).
202. Wen, C.; Chen, J.; Chen, C. Effect of different organic fertilizer application on water utilization rate of potato. *Agr. Dev. Equipments* **2016**, 71-72. (in Chinese).
203. Xue, Y.; Wang, A. Investigation report on fertilizer utilization of potato crops in Fenggang county. *Agr. Tech. Ser.* **2016**, *5*, 153. (in Chinese).
204. Zhou, K.; Zuo, M.; Zheng, M. Effects of different application ratios and times of nitrogen and potash fertilizers on yield of early-maturing potato. *J. Changjiang Veg.* **2016**, *16*, 69-71. (in Chinese with English abstract).
205. Liu, L.; Gou, J.; He, H.; Fan, C.; Qin, S. Effects of different bio-organic fertilizers on potato production and soil biochemical characteristics in a continuous cropping system. *Soils* **2017**, *49*, 706-711. (in Chinese with English abstract).
206. Long, B.; Zhang, Y.; Huang, W.; Wu, P.; Wang, K. Study on the fertilizer utilization rate of winter potato on low mountain basin area in southeastern Guizhou. *Tillage Cultivation* **2018**, *1*, 9-11. (in Chinese with English abstract).
207. Zhang, M.; Gou, J.; Wei, Q.; Chen, L.; He, G. Effects of different biological organic fertilizers on the growth of spring potato and soil fertility at high altitude region in Guizhou province. *Crops* **2019**, *3*, 132-136. (in Chinese with English abstract).
208. Zhang, M.; Wei, Q.; Xu, Y.; Ma, Z.; Zhang, R.; Gou, J.; Chen, L.; He, G. Effect of amount of water retention agent on growth and soil fertility of potato with dry farming and covering farmland by plastic films in Guizhou. *Southwest China J. Agr. Sci.* **2019**, *32*, 1087-1091. (in Chinese with English abstract).



209. Xu, Y.; Xiang, H. Comparative test of introduced potato varieties in Bijiang district, Tongren city. *Agr. Tech. Ser.* **2019**, *36*, 33-34. (in Chinese).
210. Lv, H.; Wang, X.; Chen, Y.; Lu, X.; Mao, G.; Shen, Y. Effects of nitrogen, phosphorus and potassium application by stages on yield and quality of potato. *Chin. Agr. Sci. Bull.* **2010**, *26*, 197-200. (in Chinese with English abstract).
211. Zeng, Q.; Zeng, W. A preliminary report on reagent control of late blight in spring potato covered with plastic film. *South China Agr.* **2018**, *12*, 26-28. (in Chinese with English Abstract).
212. Han, K. The potato seed grows and the key planting technology in Dalian town, Guizhou. *Agr. Eng. Tech.* **2020**, *2*, 40. (in Chinese).
213. Qin, Y.; Tu, S.; Feng, W.; Sun, X.; Liao, M. Effect of different sources and rate of potassium fertilizer on potato yield and quality. *Southwest China J. Agr. Sci.* **2010**, *23*, 1950-1954. (in Chinese with English abstract).
214. Fu, X. Study on effects of P, K and organic fertilizer on quality and yield of potato. Sichuan Agricultural University, Ya'an, China, 2012.
215. Huang, X.; Wang, Y.; Luo, X.; Fu, L.; Yang, G.; Peng, M. Experimental study on controlled-release fertilizer effect on winter potato. *Mod. Agr. Sci. Tech.* **2015**, *44*, 51-52. (in Chinese).
216. Xu, L. Influence of different nitrogen forms and various NPK combinations on nutrient accumulation and yield formation of spring and autumn potatoes. Sichuan Agricultural University, Chengdu, China, 2016.
217. Zheng, G.; Dong, Y.; Zhu, B.; Zhang, X.; Zhao, H.; Feng, Y. Effects of different fertilization patterns on potato yield and economic benefits in Tongjiang. *Hubei Agr. Sci.* **2018**, *57*, 28-30. (in Chinese with English abstract).
218. Gao, J.; Tang, Y.; Shen, X.; Luo, F.; Chen, Q.; Wang, Z.; Zhu, Y. Comprehensive evaluation and classification of quality of 10 winter cropping potato cultivars in hilly areas of central Sichuan province. *Sci. Tech. Food Ind.* **2019**, *41*, 13-18. (in Chinese with English abstract).
219. Wang, Y.; Tie, W.; Zheng, C.; Jin, Y.; Liao, L.; Wan, X. Study on drip irrigation of mulched winter potato Qingshu 9 under different gradient water and fertilizer in Panxi region, Sichuan province. *Agr. Sci. Appl.* **2020**, *33*, 9-15. (in Chinese with English abstract).
220. Zhao, D.; Chen, L.; Li, Y. Effect of planting densities on yield and big potato ratios of cultivar "Hezuo 88". *Chin. Potato J.* **2004**, *18*, 218-219. (in Chinese).
221. Zhang, Y. Technical measures of potato planting management in mid-levels of Dianyuan mountain in Songming county. *Agr. Dev. Equip.* **2005**, *3*, 131. (in Chinese).
222. Li, Z.; Chen, J.; Luo, Y. Effects of different phosphate fertilizer application on the growth and yield of winter potato "cooperative 88". *Yunnan Agr. Sci. Tech.* **2010**, *6*, 6-8. (in Chinese with English abstract).
223. Yang, G.; Liu, Z.; Dong, X.; Liu, C.; Liao, Z.; Li, C. Effect of refined organic fertilizer application on potato yield. *Chin. Potato J.* **2011**, *25*, 296-297. (in Chinese with English abstract).
224. Zhang, Y.; Rao, M.; Yang, S.; Yang, S.; Zhang, J.; Fang, X.; Zhang, Y.; Zhang, Y. Effect of planting time on yield and output value of "Lishu 6". *Yunnan Agr. Sci. Tech.* **2015**, *2*, 10-12. (in Chinese with English abstract).
225. Wang, J.; Duan, M. Study on potato planting and fertilization characteristics in Qiaojia county. *China Agr. Inf.* **2017**, *23*, 63-64. (in Chinese).
226. Yang, Q. Study on high yield cultivation mode of potato in Tai'an town Yulong county of Li Jiang. Yunnan Agricultural University, Kunming, China, 2017.
227. Luo, L.; Yang, R.; Zhang, D. Effect of different fertilizer application on quality of winter potato in Yunnan. *Guizhou Agr. Sci.* **2017**, *45*, 88-91. (in Chinese with English abstract).
228. Zhang, L.; Cheng, L.; Dian, X.; Qi, X.; Jiang, M.; Qian, Q. Comparison experiment of mulch potato in central Zhejiang province. *Seed Sci. Tech.* **2018**, *11*, 116-117. (in Chinese ).
229. Zhang, Y.; Duan, Z.; Yang, K.; Li, J.; Zhao, B.; Yang, X.; Li, L. One year and multi-location comparative test of early winter potato varieties in Dali prefecture. *Chin. Potato J.* **2018**, *32*, 332-339. (in Chinese with English abstract).

230. Wang, S.; He, X.; He, P.; Wang, J.; He, S.; Yang, Q.; Shi, T.; He, X.; Z., H. Comprehensive control technology of potato late blight in Lijiang. *Vegetables* **2018**, *9*, 65-66. (in Chinese with English abstract).
231. Xiao, S.; Wu, Q.; Liang, S.; Pu, H.; Shao, Y.; Gao, S.; Ji, S.; Sui, Q.; Li, Y. Study on Fertigation Technology of Winter Potato. *Water Saving Irrig.* **2018**, *1*, 67-72. (in Chinese with English abstract).
232. Han, X.; Fan, M.; Liu, R.; Tang, L.; Zhang, F. Analysis of potato farming NPK inputs and soil nutrient balance in Yunnan province. *J. Yunnan Agri. Univ. (Nat. Sci.)* **2019**, *34*, 538-543. (in Chinese with English abstract).
233. Bai, Q.; Xiao, S.; Wang, X.; Liu, L.; Gao, S.; Shao, Y.; Wang, X.; Pu, H.; Liang, S.; Zhang, L.; et al. Effect of reduced chemical fertilizer plus biological fertilizer on autumn potato yield. *Soils Crops* **2019**, *8*, 158-165. (in Chinese with English abstract).
234. Li, M.; Xu, D.; Chen, D.; Yue, W.; Yin, X.; Zhang, W. Experiment on potato late blight prevention by different medicament mixing. *Yunnan Agr. Sci. Tech.* **2019**, *6*, 46-48. (in Chinese).
235. Yang, X.; Xie, C.; Zhao, B.; Tao, C. The comparison test of new high-altitude potato varieties (lines) in Dali prefecture in 2017. *Yunnan Agr. Sci. Tech.* **2019**, *6*, 6-10. (in Chinese).
236. Yue, C.; Xiao, S.; Wang, H.; Wang, Y.; Liu, L.; Teng, S.; Luo, P.; Liu, Z.; Lou, P.; Mao, Y.; et al. Effect of nitrogen fertilizer rate on yield and nitrogen use efficiency of different winter potato varieties. *Soil Fert. Sci. China* **2019**, *2*, 119-125. (in Chinese with English Abstract)
237. Teng, S.; Wang, G.; Yue, C.; Wang, H.; Wu, J.; Yang, G.; Liu, L. Screening test of a new variety (line) of early spring potato in Gejiu city. *Yunnan Agr. Sci. Tech.* **2020**, *2*, 47-50. (in Chinese).
238. Wei, B.; Wei, W.; Gan, X.; Tang, Y.; Tan, W.; Ning, X. Study on winter varieties ratio and planting density of new potato varieties. *Chin. Potato J.* **2005**, *19*, 30-32. (in Chinese with English abstract).
239. Li, Y. Effects of different fertilizer rates on yield and main economic characters of winter potato. *Chin. Potato J.* **2008**, *22*, 228-229. (in Chinese with English abstract).
240. Lv, J.; Kuang, W.; Liang, H.; Liang, Y.; Liu, Y. No-tillage winter potato development and strategy in Guangxi. *China Seed* **2008**, *9*, 14-15. (in Chinese).
241. He, X.; Tan, G.; Tan, Z.; Li, L.; He, H. Identification of winter potato varieties using agro-economic and yield characteristics. *J. Southern Agr.* **2011**, *42*, 142-144. (in Chinese with English abstract).
242. Li, L.; Tang, Z.; Wang, H.; He, H.; He, X.; Tan, G. Comparative analysis of winter potato cultivars planted in Guangxi. *J. Southern Agr.* **2012**, *43*, 167-170. (in Chinese with English abstract).
243. Ou, Q. A comparison experiment of 6 cultivation methods of winter potato. *J. Guangxi Agr.* **2012**, *27*, 17-19. (in Chinese with English abstract).
244. Tang, Z.; Li, W.; He, X.; Tan, G.; Xie, K. Effect of different rice-straw mulch and planting patterns on the yield of winter potato in Guangxi. *Chin. Potato J.* **2012**, *26*, 147-154. (in Chinese with English abstract).
245. Song, S. Effect of nitrogen application patterns on nitrogen use efficiencies and fertilizer fate of winter-planting potato in Guangxi. Guangxi University, Nanning, China, 2015.
246. Huang, H.; Luo, W. Study on different planting methods of winter potato. *Mod. Agr. Sci. Tech.* **2015**, *9*, 83-84. (in Chinese).
247. Shi, D.; Yan, F.; Zheng, X.; Tan, W.; Lv, J.; Fan, J.; Zhang, Y.; Zhong, C. Key techniques for high yield and income increase of winter potato in karst region. *Agr. Dev. Equip.* **2017**, *5*, 136-137. (in Chinese).
248. Deng, J.; Si, B.; Su, C. Comparative study on varieties of winter potato. *Xiangcun Keji* **2018**, *7*, 87-88. (in Chinese).
249. Liu, X.; Fang, Z.; Li, Y.; Zhang, X.; Peng, X. Comparative study on introduction of winter potato in Guangdong. *Chin. Potato J.* **2009**, *23*, 35-37. (in Chinese with English abstract).
250. Chen, S.; Luo, W.; Tang, H.; Zheng, L.; Wu, L. Optimization and integration technology for high yield of winter potato in Longhai city. *Crops* **2010**, *1*, 105-106. (in Chinese with English abstract).
251. Li, X.; Fang, Z.; Li, Y.; Peng, X.; Huang, C.; Zhang, X.; Wu, X.; Liu, X. Planting density trial of potato variety Yueyin 85-38 grown in winter in Guangdong province. *Chin. Potato J.* **2010**, *24*, 338-340. (in Chinese with English abstract).

252. Zhang, X.; Zhang, H.; Li, S.; Tan, Q.; Cao, X.; He, L. Investigation and analysis of fertilization application status of winter potato (*solanum tuberosum*) with typical planters in Enping city. *J. Anhui Agr. Sci.* **2011**, *39*, 22286-22288. (in Chinese with English abstract).
253. Li, X.; Liu, X.; Fang, Z.; Zhang, X.; He, Q.; Peng, X.; An, K. Variety comparative test of winter potato of Guangdong. *Guangdong Agr. Sci.* **2012**, *18*, 26-28. (in Chinese with English abstract).
254. Zhou, X.; He, Z.; Li, Y.; Zhou, D. Study on nitrogen fertilizer effect of mulching on winter potato. *Anhui Agr. Sci. Tech. Bul.* **2014**, *20*, 39-40. (in Chinese with English abstract).
255. Huang, M.; Feng, J.; Xu, P.; Zhang, X.; Wang, K.; He, X.; Chen, H.; Cao, X. Effects of different dosages of phosphate fertilizer on yield, economic benefits and quality of winter potato in Guangdong province. *Guangdong Agr. Sci.* **2017**, *44*, 23-29. (in Chinese with English abstract).
256. Qiu, P.; Zheng, D.; Qiu, Y. Management measures of potato cultivation in winter in Guangdong province. *China Fruit Veg.* **2019**, *39*, 75-77. (in Chinese with English abstract).
257. Li, C.; An, K.; Sui, H.; Liu, X.; Li, X. Investigation and strategies for winter potato fertilization in Guangdong province. *Chin. J. Trop. Crops* **2019**, *40*, 2054-2060. (in Chinese with English abstract).
258. Guan, L.; Li, S.; Tan, W.; Chen, J.; Zhang, X. Effects of replacement of chemical fertilizer with organic manure on yield and quality of winter potato in South China. *Guangdong Agr. Sci.* **2019**, *46*, 62-68. (in Chinese with English abstract).
259. Luo, Q.; Zhang, X.; Chen, L.; Xu, P.; Pan, S.; He, C.; Cao, X. The yield and economic benefit of potato in winter under different release periods of slowly controlled release compound fertilizer and ratio of nitrogen, phosphorus and potassium. *Chin. J. Trop. Crops* **2020**, *41*, 1589-1595. (in Chinese with English abstract).
260. Chen, Y. Effect of balanced fertilization on potato in winter. *Fujian J. Agr. Sci.* **2007**, *5*, 77-78. (in Chinese with English abstract).
261. Gao, X. Effect of balanced nitrogen, phosphorus and potassium fertilization on potato in costal aeolian sandy soil. *Chin. Potato J.* **2008**, *22*, 34-35. (in Chinese with English abstract).
262. Zhang, M.; Yao, B.; Li, J.; Kong, Q.; Chen, Y. Nitrogen, phosphorus and potassium fertilization for winter potatoes in Fujian. *Fujian J. Agr. Sci.* **2012**, *27*, 982-988. (in Chinese with English abstract).
263. Huang, C.; Zhong, Z.; Xia, L. Preliminary report on the fertilizer efficiency experiment '3414' of potato in Xiapu County, Fujian Province. *Subtrop. Agr. Res.* **2012**, *8*, 13-16. (in Chinese with English abstract).
264. Li, H.; Luo, W.; Ji, R.; Liu, Z.; Xu, Y.; Qiu, Y.; Qiu, S.; Tang, H. Effect of different fungicide combinations on the control of potato late blight and yield of potato. *Fujian J. Agr. Sci.* **2013**, *28*, 812-816. (in Chinese with English abstract).
265. Huang, Y. High-yielding cultivation techniques of potato cropped in winter season in Lianjiang County. *Fujian Agr. Sci.* **2013**, 36-37. (in Chinese with English abstract).
266. Lin, Y.; Huang, L.; Zhang, Z.; Zhou, J.; Luo, W.; Guo, Y. A comparative test of newly introduced varieties (lines) as winter potatoes in Fuzhou city. *Chin. Potato J.* **2017**, *31*, 321-325. (in Chinese with English abstract).
267. Li, G.; Wu, L.; Liang, J.; Zhang, Y.; Dong, C.; Bai, Y. Study on soil testing and fertilization of potato in Daxinganling area. *Chin. Potato J.* **2003**, *17*, 85-87. (in Chinese with English abstract).
268. Ma, L. Pharmacodynamic test for prevention and control of potato late blight with 50% Mancozeb Flumorph WP. *Chin. Potato J.* **2010**, *24*, 41-43. (in Chinese with English abstract).
269. Dong, A.; Hu, X.; Shao, X.; Wang, X.; Wu, Q. Comparison for late blight resistance and chemical control of twelve potato varieties. *Chin. Potato J.* **2012**, 302-307. (in Chinese with English abstract).
270. You, H.; Jin, G.; Liu, X.; Gao, Y.; Jiang, L.; Feng, Y.; Wang, T. Effects on plant traits and yield of 'Kenshu 1' of cut versus whole seed planted in various densities in large ridge two-lines planting pattern. *Chin. Potato J.* **2016**, *30*, 87-92. (in Chinese with English abstract).
271. Tian, J. Study of the effect of density regulation on potato tuber size distribution and nutrients accumulation. Northeast Agricultural University, Harbing, China, 2017.

272. Yang, M.; Song, J.; Sun, B.; Liu, C.; Liu, X. Effect of different fertilizations combination on yield and quality of potato. *Heilongjiang Agr. Sci.* **2018**, *11*, 26-31. (in Chinese with English abstract).
273. Pang, W.; Jin, L.; Dian, C.; Duan, S.; Liu, J.; Xu, J. Planting density trial of the cultivar Zhongshu 3. *Chin. Potato J.* **2009**, *23*, 200-202. (in Chinese with English abstract).
274. Gong, J.; Zhao, S.; Wang, J. Comprehensive control of main diseases, pests and weeds in potato fields. *Mod. Agr.* **2012**, *12*, 28-29. (in Chinese with English abstract).
275. Wu, C. Study on variation rule of potato water demand and irrigation system in Linxian, Shanxi province. *Ground water* **2017**, *39*, 86-89. (in Chinese with English abstract).
276. Liu, Z. Studies on sustainable management technique of potato's disease and insect pests in mid-plain with two-time crops. Shandong Agricultural University, Jinan, China, 2005.
277. Kong, L.; Han, W. Study on the effect of fushuide and kejia on controlling potato late blight. *Shandong Agr. Sci.* **2011**, *3*, 92-93. (in Chinese with English abstract).
278. Wang, L. Effect of drip organic fertilizer with foliage-spraying on yield and quality of potato. Henan Agricultural University, Zhengzhou, China, 2012.
279. Zhang, M.; Li, G. Big ridge and double plastic mulching cultivation techniques in Yancheng region of Luohe city. *Mod. Agr. Sci. Tech.* **2012**, *18*, 63-64. (in Chinese).
280. Guo, Z.; Wu, H.; Chen, H. Planting density trial of potato Favorita in spring. *J. Changjiang Veg.* **2012**, *4*, 27-29. (in Chinese with English abstract).
281. Chen, H.; Zhang, X.; Wu, H.; Xie, P. Comparative test of spring open field potato cultivars in Henan province. *J. Changjiang Veg.* **2019**, *2*, 49-52. (in Chinese with English abstract).
282. Hu, B. Establishment of potato-including cropping system at Hetao irrigated area and the evaluation of its resources use efficiencies. Inner Mongolia Agricultural University, Hohhot, China, 2012.
283. Hao, N.; Wu, Z.; Zhang, L.; Jin, H. Effects of sunflower intercropping with fababean and potato on crop yield and water use efficiency. *J. Jilin Agr. Univ.* **2018**, *40*, 666-674. (in Chinese with English abstract).
284. Zhou, C.; Wang, S.; Zhang, X.; Lu, Z.; Zhang, D.; Cheng, Y.; Fang, J.; Shi, G. Effects of different chemical soaking treatments on the control of potato late blight and yield. *J. Northern Agr.* **2019**, *47*, 80-84. (in Chinese with English abstract).
285. Li, Y.; Wang, T.; Liu, S.; Liu, X.; Jia, Z.; Ren, S. Effects of compound fertilizers specified for potato and water-fertilizer production efficiency. *Chin. Agr. Sci. Bull.* **2006**, *22*, 193-197. (in Chinese with English abstract).
286. Meng, Y.; He, W. Effects of different ridge patterns on potato water use efficiency and economic benefits in rainfed region. *J. Henan Agr. Univ.* **2018**, *52*, 506-513. (in Chinese with English abstract).
287. Cai, M.; Liu, J.; Yang, Y.; Wu, N.; He, H.; He, J. Effects of nitrogen application and potato-oats intercropping on dry matter accumulation, yield and quality of potato. *Acta Agriculturae Boreali-occidentalis Sinica* **2020**, *29*, 1-9. (in Chinese with English abstract).
288. Zhang, X. Experiment and benefit analysis of potato fertilization technology in Huining county. *Chin. Potato J.* **2008**, *22*, 349-351. (in Chinese with English abstract).
289. Wang, C.; Wang, D. The control effect and economic benefit analysis of different fungicides on potato late blight. *Chin. Potato J.* **2009**, *23*, 290-292. (in Chinese with English abstract).
290. Zhang, Q.; Huang, Y.; Wu, X. Effect of different fertilizer modes on potato yield and economic benefits. *Jilin Agr.* **2010**, *10*, 76. (in Chinese).
291. Fan, H. The optimal ratio and rate of NPK fertilizer application in Minle county potato production. *Chin. Potato J.* **2011**, *25*, 105-107. (in Chinese with English abstract).
292. Tang, Y.; Gao, S.; Wang, Y.; Zhang, X. Soil water and thermal effects of different mulching and planting methods and their influences on yield in dryland potato production. *Agr. Res. Arid Areas* **2013**, *31*, 1-13. (in Chinese with English abstract).
293. Shi, Y.; Chen, Y.; Liu, S.; Hou, Y.; Pei, H.; Wang, H.; Zhang, Y. Influence of different mulching models on soil moisture and temperature, and yield of potato in semi-arid land. *Chin. Potato J.* **2013**, *27*, 19-24. (in Chinese with English abstract).

294. Liu, Y.; Zhang, C.; Qin, J.; Wang, A.; Xiao, Z.; Zhan, Y. Formula screening of multi-functional fertilizer for potato and effects on soil physical and chemical properties. *Agr. Res. Arid Areas* **2014**, *32*, 127-133. (in Chinese with English abstract).
295. Zhao, H.; Wang, R.; Ma, B.; Xiong, Y.; Qian, S.; Wang, C.; Liu, C.; Li, F. Ridge-furrow with full plastic film mulching improves water use efficiency and tuber yields of potato in a semiarid rainfed ecosystem. *Field Crops Res.* **2014**, *161*, 137-148. (in Chinese with English abstract).
296. Wang, J. Effect of different nitrogen and phosphate fertilizer on mulching potato yield. *Agr. Sci.-Tech. Inf.* **2016**, *28*, 107-109. (in Chinese).
297. Du, J. Water deficit regulation of oasis potato under mulched drip irrigation and optimizing of the irrigation schedules. Gansu Agricultural University, Lanzhou, China, 2016.
298. Luo, Z. Comparative experiment of optimal fertilization and conventional fertilization on potato. *Agr. Tech. Ser.* **2017**, *6*, 77-78. (in Chinese).
299. Zhang, Y.; Wang, F.; Shock, C.; Yang, K.; Kang, S.; Qin, J.; Li, S. Effects of plastic mulch on the radiation and thermal conditions and potato growth under drip irrigation in arid Northwest China. *Soil Tillage Res.* **2017**, *172*, 1-11. (in Chinese with English abstract).
300. Chen, Y.; Tain, H.; Li, Y.; Cai, Y.; Li, R.; Cheng, H.; Chang, L.; Cai, S. Effects of straw strip mulching on furrows and planting in ridges on water use efficiency and tuber yield in dryland potato. *Acta Agronomica Sinica* **2019**, *45*, 714-727. (in Chinese with English abstract).
301. Wang, H.; Wang, J.; Chen, J.; Su, H. Preliminary report on the effect of potato mulching with different degradation films under drip fertigation under film. *Agr. Sci.-Tech. Inf.* **2020**, *1*, 7-9. (in Chinese).
302. Yang, Y.; Li, J.; Ran, P.; Dong, H.; Chen, X.; Ma, X. Study on the planting model of straw covered potato in dry farming area of Anding district. *Chin. Potato J.* **2020**, *34*, 86-93. (in Chinese with English abstract).
303. Li, J.; Li, J. The experiment of reducing fertilizers and increasing efficiencies of potato using water retention agent in Anding district, Dingxi city. *Mod. Agr. Sci. Tech.* **2020**, *9*, 60-61. (in Chinese).
304. He, W.; Huang, K.; Ling, P.; Chen, Z.; Wang, J.; Pan, X.; Zhang, J.; Li, P. Effects of different ratio of organic fertilizer nitrogen to fertilizer nitrogen on the absorption capacity and morphology of potato roots. *Crops* **2020**, 132-136. (in Chinese with English abstract).
305. Qian, Y.; Tian, H.; Cheng, H.; Ma, J.; Chai, Y.; Li, Y.; Chai, S. Effects of straw mulching and sowing methods on water consumption characteristics and yield of potato in arid region of Northwest China. *Chin. Potato J.* **2020**, *28*, 826-834. (in Chinese with English abstract).
306. Chen, R.; Xu, Y.; Shi, Y.; Shen, H.; Liu, C.; Wu, B.; Zhang, Z. Efficient model research of cotton continuous cropping potato of Hukou county in north Jiangxi province. *Cotton Sci.* **2015**, *37*, 54-56. (in Chinese with English abstract).
307. Bi, L.; Zhang, F.; Wang, H.; Wang, Y.; Wu, Y.; Xiang, Y.; Fan, J. Effects of regulated water and fertilizer on potato growth, quality, water and fertilizer use efficiency under drip irrigation. *Agr. Res. Arid Areas* **2020**, *38*, 155-165. (in Chinese with English abstract).
308. Liu, Z. Analysis on the comprehensive benefits of potato planting under different irrigation methods. *Water Conserv. Sci. Tech. Econ.* **2020**, *26*, 81-84. (in Chinese with English abstract).
309. Zhu, S.; He, C.; Song, Y.; Xiong, X.; Liu, M. Effect of fertilization in dissimilar sorts of soil on production and quality of potato. *J. Hunan Agr. Univ. (Nat. Sci.)* **2009**, *35*, 423-426. (in Chinese with English abstract).
310. Kou, S.; Song, Z.; Zheng, X.; Huang, L.; Song, B. Effects of five plant growth regulators and boric acid on potato minituber production and dormancy period. *Chin. Potato J.* **2017**, *31*, 65-70. (in Chinese with English abstract).
311. Xiang, L.; Gong, S.; Wang, H.; Zhang, X.; Yang, L. Control effects of three chemical fungicides against potato late blight. *Hubei Agr. Sci.* **2017**, *56*, 4774-4776. (in Chinese with English abstract).
312. Zhan, Y.; Cheng, W.; Shu, J.; Mao, Y. The performance of a new early-maturing potato variety in Yunmeng, Hubei province. *China Agr. Tech. Extension* **2019**, *35*, 32-34. (in Chinese).

313. Li, K.; Yuan, Z.; Wu, Y. Demonstration effect and application prospect of new potato planting technology covered by no-tillage straw in rice field. *Hunan Agr. Sci.* **2002**, *4*, 29-30. (in Chinese with English abstract).
314. Chen, Y.; He, J. Effects of different sowing periods on growth and yield of spring potato in Changsha. *Hunan Agr. Sci.* **2010**, *11*, 43-44, 57. (in Chinese with English abstract).
315. Liu, M.; Xiong, X.; Song, Y.; Huang, K.; Qin, Y. Effect on growth, yield and quality of potato cv. Favorita with different sowing methods. *Chin. Potato J.* **2011**, *25*, 23-25. (in Chinese with English abstract).
316. Li, C.; Wang, B.; Huang, H.; Zheng, Z. Present situation and strategies s of potato industry in Hangzhou. *J. Zhejiang Agr. Sci.* **2019**, *60*, 58-60. (in Chinese with English abstract).
317. Ma, Z.; Liu, Z.; Hu, J.; Hu, Y.; Xiong, Q. Discussion on the cultivation technique of spring potato covered with plastic film. *Chin. Potato J.* **2001**, *3*, 147-149. (in Chinese with English abstract).
318. Lei, A.; Gong, Q. Discussion on high yield cultivation techniques of vegetable potatoes in fallow paddy of Yichun of Jiangxi Province. *Horticulture Seed* **2014**, 36-38, 49. (in Chinese with English abstract).
319. Lv, Z.; Zhang, W.; Deng, J.; Yang, X. Effects of different mulching methods on yield increase of dryland potato in the mountainous area of west Zhejiang province. *Chin. Potato J.* **2000**, *14*, 101-102. (in Chinese with English abstract).
320. Wu, J.; Zhang, C.; You, A.; Hu, Y.; Qian, T.; Hu, Y.; Fan, P. Effect of yinfari and other medicament on potato disease control. *J. Zhejiang Agr. Sci.* **2011**, *2*, 378-379. (in Chinese with English abstract).
321. Zhang, C.; You, A.; Wu, J.; Ye, C.; Ge, L.; Chu, F. Discussion on pest control technology of potato. *J. Zhejiang Agr. Sci.* **2011**, *3*, 673-674. (in Chinese with English abstract).
322. Chen, G.; Qu, W.; Zhu, J. Effects of potassium rates and planting density on potato yield and commodity rate. *Chin. Agr. Sci. Bull.* **2013**, *29*, 166-169. (in Chinese with English abstract).
323. Shen, S.; Wu, L.; Xiang, C.; Li, B. Performance in multi-point variety comparison tests of potato MG56 in Zhejiang province. *Bull. Agr. Sci. Tech.* **2018**, *11*, 94-96. (in Chinese with English abstract).
324. Wang, G.; He, Y.; Long, Q.; Hao, W.; Xue, G. Demonstration and promotion of no-tillage potato cultivation technology in Dongtai city. *Chin. Potato J.* **2009**, *23*, 49-50. (in Chinese).
325. Ji, Y. Study on optimal fertilization and potassium effect of virus-free potato in high altitude area. Guihzou University, Guiyang, China, 2008.
326. Xiang, Z.; Zheng, B.; Wu, X. Preliminary report on the control effect of 68.75% silver-follicle SC on potato late blight. *Tillage Cultivation* **2009**, 48. (in Chinese).
327. Peng, L.; Ma, Y. A field experiment on chemicals effects to control potato late blight. *Guizhou Agr. Sci.* **2009**, *37*, 115-117. (in Chinese with English abstract).
328. Fan, S.; Wang, D.; Zhang, J.; Bai, J.; Song, J.; Ma, Z. Effect of tillage strategies on the topsoil water content and the yield of potato. *Acta Prataculturae Sinica* **2012**, *21*, 271-279. (in Chinese with English abstract).
329. Deng, R.; Lu, Y.; Pan, J.; He, T.; Li, F.; Li, B.; Zeng, X.; Lei, Z. Effects of different cultivation patterns on drought and cold resistance of potatoes grown in winter in Guizhou province. *Jiangsu Agr. Sci.* **2016**, *44*, 119-122. (in Chinese with English abstract).
330. Liang, J.; He, H.; Pan, X.; He, Z.; Luo, Q.; Meng, S.; Meng, G. Occurrence, outbreak regularity and effects on yield of potato late blight. *J. Changjiang Veg.* **2016**, *20*, 81-82. (in Chinese).
331. Yang, H. Effect of the ratio of intrarow spacing to row spacing on potato's photosynthetic physiology, yield and quality. Southwest University, Chongqing, China, 2017.
332. Xing, J.; Wang, H. Analysis on field control test of potato late blight. *South China Agr.* **2018**, *12*, 49-50. (in Chinese).
333. Li, G. Study on effect of nitrogen management on nutritive, peculiarity, yield and quality of potato. Sichuan Agricultural University, Chengdu, China, 2009.
334. Liu, Z.; Deng, B.; Zhou, X.; Luo, Q.; Zhu, G. First report of different fungicide control effect experiment on potato late blight. *J. Xichang Coll. (Nat. Sci. E.)* **2014**, *28*, 8-10. (in Chinese with English abstract).

335. Dong, H.; Liu, S.; Wang, L.; Xia, J.; Chen, C. Screening test and research on prevention and treatment of potato late blight in Liangshan prefecture. *Bull. Agr. Sci. Tech.* **2018**, *8*, 137-139. (in Chinese).
336. Li, K.; Liu, W.; Jiang, R.; Zhu, W. Preliminary report on application of controlled release fertilizer in winter potato. *Bull. Agr. Sci. Tech.* **2012**, *6*, 71-72. (in Chinese).
337. Yao, C.; Zhang, L.; Sui, Q. Investigation and analysis of potato industry in northeast Yunnan province. *Chin. Potato J.* **2015**, *29*, 374-377. (in Chinese with English abstract).
338. Wang, S.; Wang, T.; Wang, W. Analysis on the control of potato late blight agent. *Jiangxi Agr.* **2016**, *9*, 20-21. (in Chinese ).
339. Wang, C.; Wei, Q.; Fan, C.; Chen, J.; Peng, E. Effect of irrigation period and volume on growth and yield of potato growth with drip irrigation and plastic film. *Guizhou Agr. Sci.* **2017**, *45*, 45-48. (in Chinese with English abstract).
340. Yang, Y.; Zhang, S. Analysis on prevention and control effect of different fungicides and combinations on potato late blight. *Yunnan Agr. Sci. Tech.* **2017**, *2*, 54-55. (in Chinese with English abstract).
341. Zhou, J.; Tang, W.; Yang, Z.; Guo, H. The Effects of growth, yield and quality of potato with covering soil on the plastic film cultivation in spring cropping of Yunnan. *J. Yunnan Agri. Univ. (Nat. Sci.)* **2017**, *32*, 999-1005. (in Chinese with English abstract).
342. Yang, Y.; Duan, H.; Wu, G.; Li, J.; Wang, Q.; Li, D. Screening test of potato late blight agents. *Mod. Agr. Sci. Tech.* **2018**, *20*, 114-115. (in Chinese).
343. Luo, M.; Yan, M.; Le, C.; Lang, P.; Deng, Y.; Zhang, M.; Cheng, Y. Efficacy test of potato powder scab in Zhenxiong county. *Yunnan Agr. Sci. Tech.* **2020**, *2*, 35-37 (in Chinese).
344. He, H.; Gan, X.; Wei, B.; X., T.; Lu, L.; Ning, X.; Wei, M.; Tan, W. Comparative trial of introduced processing-purpose potato varieties for winter-planting in Guangxi. *Guangxi Agr. Sci.* **2009**, *10*, 1309-1331. (in Chinese with English abstract).
345. Li, L.; Fan, W.; Yang, X.; Tan, G.; Tang, Z.; He, H. Effects of different cultivation methods and sowing depth on soil water, temperature and yield of winter potato, Southwest China. *J. Agr. Sci.* **2018**, *31*, 673-679. (in Chinese with English abstract).
346. Yuan, J.; Hu, C.; Xiao, J.; Chen, X. Industry problems and development suggestions of winter potato in Guangdong. *Guangdong Agr. Sci.* **2009**, *8*, 369-370. (in Chinese).
347. Zou, X.; He, Z.; Li, Y.; Zhou, D. Study on nitrogen application efficiency of winter mulched potato. *Anhui Agr. Sci. Bul.* **2014**, *10*, 39-40. (in Chinese).
348. Lin, Q.; Xu, C. Comparative test on the control of late blight of potato in Dehua area. *Chin. Potato J.* **2008**, *22*, 223-224. (in Chinese).
349. Zhang, Z.; Weng, D.; Xie, X.; Chen, X.; Guo, Y. Characteristics of growth and development and performance of yield and quality for winter-planting potato in different cultivation models. *Res. Agr. Mod.* **2009**, *30*, 628-632. (in Chinese with English abstract).
350. Chen, H.; Zhang, X.; Quan, F.; Tang, D.; Cao, X. Influence of different ratios between NPK on yield, economic profit and fertilizer use efficiency of winter potato. *Chin. Potato J.* **2010**, *24*, 224-229. (in Chinese with English abstract).
351. Li, X.; Chen, S.; Wang, H.; Weng, D. Suitable application rate of nitrogen and potassium fertilizer in potato. *Fujian Rice Wheat Sci. Tech.* **2010**, *28*, 19-21. (in Chinese with English abstract).
352. Fang, Q. Integrated cultivation technology for high yield of potato in Longhai city. *Mod. Agr. Sci. Tech.* **2016**, *16*, 69-70. (in Chinese).
353. Li, M.; Wu, X.; Xiao, D.; Luo, W. Comparative test on winter potato varieties in coastal sandy land in Changle county. *Chin. Potato J.* **2017**, *31*, 7-10. (in Chinese).
354. Lin, Y.; Huang, L.; Zhang, Z.; Zhou, J.; Luo, W.; Guo, Y. A comparative test of newly introduced varieties (lines) as winter potatoes in Fuzhou city. *Chin. Potato J.* **2017**, *31*, 321-325. (in Chinese with English abstract).
355. Zhang, C.; Liang, J.; Zhang, Z.; Huang, P.; Zhou, M. Comparison test on new spring potato cultivars (lines) in Longyan. *Fujian Agr. Sci. Tech.* **2018**, *5*, 15-17. (in Chinese with English abstract).
356. Wu, Z.; Liao, D.; Wu, Y.; Wang, M.; Fu, J. The comparative trail of winter potato in Hainan. *Chin. Agr. Sci. Bull.* **2014**, *30*, 179-183. (in Chinese with English abstract).

357. NATESC. *Nutrients of Organic fertilizers in China*; Center, N.A.-T.E.S., Ed.; Science and Technology of China Press: Beijing, China, 1999.
358. Ma, L.; Velthof, G.L.; Wang, F.H.; Qin, W.; Zhang, W.F.; Liu, Z.; Zhang, Y.; Wei, J.; Lesschen, J.P.; Ma, W.Q.; et al. Nitrogen and phosphorus use efficiencies and losses in the food chain in China at regional scales in 1980 and 2005. *Sci. Total Environ.* **2012**, *434*, 51-61, doi:10.1016/j.scitotenv.2012.03.028.
359. Lu, R.; Liu, H.; Wen, D.; Qin, S.; Zheng, J.; Wang, Z. Studies on nutrient cycling and balance in agricultural ecosystems in typical regions of China II. Parameters of farmland nutrient income. *Chin. J. Soil Sci.* **1996**, *27*, 151-154. (in Chinese).
360. Wang, G. Study on the paddy nitrogen balance under different N and water coupling in typical red soil areas. Nanjing Agricultural University, Nanjing, China, 2007.
361. Gao, L. Analysis and evaluation of nitrogen flow in the food chain system—A case study of Huang-Huai-Hai Region. Hebei Agricultural University, Baoding, China, 2009.
362. Zhang, H. Gaseous loss and balance of nitrogen from paddy field in irrigation area of the upper yellow river. Chinese Academy of Agricultural Sciences, Beijing, China, 2011.
363. Lu, X. Study on dynamic balance and optimal management of nitrogen in farmland. Shanghai Normal University, Shanghai, China, 2011.
364. Xu, W.; Luo, X.; Pan, Y.; Zhang, L.; Tang, A.; Shen, J.; Zhang, Y.; Li, K.; Wu, Q.; Yang, D.; et al. Quantifying atmospheric nitrogen deposition through a nationwide monitoring network across China. *Atmos. Chem. Phys.* **2015**, *15*, 12345-12360, doi:10.5194/acp-15-12345-2015.
365. Han, W.; Jin, G. Effects of different drip irrigation modes on yield and quality of potato. *Chin. Potato J.* **2011**, *24*, 263-266. (in Chinese with English abstract).
366. Bai, Y.; Wang, K.; Li, Z.; Miao, M. Study on the effect of water-soluble fertilizer on potato. *Mod. Agr.* **2013**, *11*, 22-23. (in Chinese with English abstract).
367. Pan, Y.; Wang, Y. Atmospheric wet and dry deposition of trace elements at 10 sites in Northern China. *Atmos. Chem. Phys.* **2015**, *15*, 951-972, doi:10.5194/acp-15-951-2015.
368. Li, S.; Jin, J. Characteristics of nutrient input/output and nutrient balance in different regions of China. *Scientia Agricultura Sinica* **2011**, *44*, 4207-4229. (in Chinese with English abstract).
369. Peng, H. High yield fertilization technology of potato. *Rural Sci. Tech.* **2006**, *2*, 37-39. (in Chinese).
370. Gao, H.; Liang, H.; Wang, F.; Shi, X.; Liu, F. Research progress of potato cultivation technology in China. *J. Jilin Agr. Sci.* **2007**, *32*, 17-19. (in Chinese).
371. Hong, J. Integration of high yield cultivation techniques for winter potato in Honghe prefecture, Yunnan province. *Changjiang Veg.* **2016**, *1*, 35. (in Chinese), doi:10.3865/j.issn.1001-3547.
372. Wu, Y. Effect of NPK fertilizers application on production characteristics of carrot, potato and celery in Xining outskirts. Lanzhou University, Lanzhou, China, 2015.
373. Gao, B.; Ju, X.T.; Zhang, Q.; Christie, P.; Zhang, F.S. New estimates of direct N<sub>2</sub>O emissions from Chinese croplands from 1980 to 2007 using localized emission factors. *Biogeosciences* **2011**, *8*, 3011-3024, doi:10.5194/bg-8-3011-2011.
374. Zhang, D.; Shen, J.; Zhang, F.; Li, Y.; Zhang, W. Carbon footprint of grain production in China. *Sci. Rep.* **2017**, *7*, 4126, doi:10.1038/s41598-017-04182-x.
375. Xie, Z.; Fan, P.; Wu, H.; Cheng, K.; Pan, G. Deriving volatile factors and estimating direct ammonia emissions for crop cultivation in China. *Acta Sci. Circum.* **2020**, *40*, 4180-4188. (in Chinese with English abstract).
376. Yan, X.; Akimoto, H.; Ohara, T. Estimation of nitrous oxide, nitric oxide and ammonia emissions from croplands in East, Southeast and South Asia. *Global Change Biol* **2003**, *9*, 1080-1096, doi:DOI 10.1046/j.1365-2486.2003.00649.x.
377. Zhao, R.; Feng, Y.; Ma, Q.; Yao, L.; Gao, J.; Zhao, X. Effects of different fertilization schemes on soil ammonia volatilization during flowering cabbage growth in south China. *J. Agro-Env. Sci.* **2022**, *41*, 681-690. (in Chinese with English abstract).