

**BIBLIOGRAPHY AND ABSTRACTS  
OF  
THAI POULTRY SCIENTIFIC PAPERS**





## PREFACE

The preparation of this report was part of the activities for the FAO project "Future prospects for the contribution of village poultry production to food security in developing Asian economies" (GCP/RAS/228/GER) that was funded by the "Deutsche Gesellschaft für Technische Zusammenarbeit GmbH (GTZ)". The production systems of small poultry producers show a significant variety from very low input systems with scavenging birds to those with improved genetic resources, supplementary feeding and animal health interventions. In many countries the exact type of poultry used in the small production systems is presently not well understood. The recognition of the needs to fully consider poultry genetic resources and their genetic diversity has only recently got momentum due to the outbreaks of Avian Influenza and the related control measures. A good understanding of the production systems of small poultry producers including their priorities and constraints is also required to design and implement appropriate control strategies for the small poultry producers. This will help to achieve cooperation and proper involvement of small farmers in disease prevention and control programmes. It will also assist Governments to make appropriate plans for designing and implementing their disease control strategies. The present bibliography summarizes published reports and grey literature about poultry production in Thailand in the fields of (i) Management and feeding systems, (ii) feed resources, (iii) poultry genetic resources, (iv) marketing systems, (v) poultry health and health control systems and (vi) cultural issues. The report also includes abstracts of research papers without an English summary. A database with the abstracts of the remaining papers is available on request from the author or from the Animal Production Service (AGAP)<sup>1</sup> of the Food and Agriculture Organization of the United Nations (FAO). We hope this report will provide accurate and useful information to its readers and any feedback is welcome by the author and AGAP.

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### Keywords

*Poultry management, Poultry nutrition, Poultry breeds, Productivity,*

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## Bibliography of papers in Thai

### Categories:

B= Breed, characteristic of Thai indigenous chickens (TIC) and productivities of other breeds compare to TIC

D= Diseases and disease control including parasites

F= Feeds and feeding for TIC and TIC crossbred

M= Productivities of TIC and TIC crossbred under traditional method and modern technologies, and extension

No	Authors	Title	Institutions	Paper type	Year	Source	Category
1	Prakob Choprakarn	Great Kings of Thailand.	Writer	Book	1980	Ruamkarnpim Publishing Company, Thailand. 708 pp.	M
2	Apichai Ratanavaraha and Permsak Siriwan, Sakol Kaikum and Somkuarn Panyadee	The comparison of castration, non-castration and feed utilization of crossbred chickens.	Maejo University	Research	1983	The Animal Science Research, 21 st Annual Conference, Kasetsart University. Bangkok, Thailand.	B
3	Chedchai Ratanasetthakul, Weerasak Wongsrikeao and Banyat Laupaiboon	Studies on disease resistance in Indigenous chickens 4. Resistance to Fowl Pox	Khon Kaen University	Research	1983	Proceedings of the first seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand 1983.	D
4	Apichai Rattanawaraha, Somchit Boonsukchai and Suthat Siri	Study on cost of raising Native chickens with low protein rations	Maejo University	Research	1983	The Animal Science Research, 23rd Annual Conference, Kasetsart University. Bangkok, Thailand.	F

No	Authors	Title	Institutions	Paper type	Year	Source	Category
5	Kreingkrai Choprakarn, Sawat Thummabutra and Worapong Suriyajantratong	Problems and approach relating to improving of Thai indigenous chickens.	Department of Livestock Development	Research	1983	Proceedings of the first seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand 1983.	M
6	Kreingkrai Choprakarn	Marketing system of Thai indigenous chicken at village level.			1983	Proceedings of the first seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand 1983.	M
7	Kreingkrai Choprakarn, Sawat Thammabutr, Niyomsak Uppatum, and Worapong Suriyachantratong	A study on survival rate and growth rate of Thai indigenous chickens.	Ubon Ratchanthani University	Research	1984	The Animal Science Research, 22nd Annual Conference, Kasetsart University. Bangkok, Thailand.	M
8	Apichai Ratanavaraha and Somchit Boonsukchai	A basis study of the performance of native exotic and crossbred chickens under natural raising condition.	Department of Livestock Development	Research	1985	The Animal Science Research, 23rd Annual Conference, Kasetsart University. Bangkok, Thailand.	M/B
9	Kreingkrai Choprakarn, Worapong Suriyachantratong, Osoth Naksakul, Pitsamai Namdaeng and Udon Senakarn	A preliminary study on growth rate of native and native x Rhode Island Red crossbred chicken.	Ubon Ratchanthani University	Research	1985	The Animal Science Research, 23rd Annual Conference, Kasetsart University. Bangkok, Thailand.	M/B

No	Authors	Title	Institutions	Paper type	Year	Source	Category
10	Banyat Laopaiboon, Cherdchai Ratanasetthakul and Prapart Neramitmansook	Study on native chicken raising in chaiyaphum.	Khon Kaen University		1986	KhonKaen Agriculture Journal. Vol. 14	M
11	Wimonporn Thitisak, Nimitr Leesirikul, Puttachat Srisopa, Manwika Pholpak and Somchai Srihakim	Causes of Indigenous chickens' death	Department of Livestock Development	Research	1988	Proceedings of the 2nd seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand 1988.	D
12	Kreingkrai Choprakarn, Sarote Khacharoen, Worapong Suriyajantratong, Apichai Siwaprapakorn, Komkrit Kaewsumran and Koakiet Cimmalee	Survival rate of native chickens after vaccination.	Department of Livestock Development	Research	1988	Proceedings of the 2nd seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand 1988.	D
13	Cherdchai Ratanasetthakul and Banyat Laopaiboon	Studies of selected herbs and chemicals for ectoparasit eradication in Indigenous chickens	Khon Kaen University	Research	1988	Proceedings of the 2nd seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand 1988.	D

No	Authors	Title	Institutions	Paper type	Year	Source	Category
14	Suwit Theerapantuwat, Pitak Sripraya, and Sompong Chaibhud	Effect of nutrition on carcass composition of Indigenous chickens	Khon Kaen University	Research	1988	Proceedings of the 2nd seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand 1988.	F
15	Yaouwaman Khacharoen, Sarote Khacharoen, Sompong Chaibhud, Pitak Sripraya, Yong yot Saingam, Pannasri Sakiya and Apivhai Siwaprapakorn	Comparison between local feed supplemented with vitamin-mineral premix and local feed supplemented with concentrate for egg layers on the production efficiency of Indigenous chickens	Khon Kaen University	Research	1988	Proceedings of the 2nd seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand 1988.	F
16	Sawat Thummabutr, Pitaya Namdang and Weerachai Potiwara	Native chickens under farmer system in the north east region.	Department of Livestock Development	Research	1988	Proceedings of the 2nd seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand 1988.	M

No	Authors	Title	Institutions	Paper type	Year	Source	Category
17	Wimonporn Thitisak, Orawan Janewiriyasopak, Malee Meka, Pratheep Laksanaporn Thepkraiwan, Kasem Chongsateint and Somchai Srihakim	Indigenous chicken production systems in Udon Thani	Department of Livestock Development	Research	1988	Proceedings of the 2nd seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand 1988.	M
18	Wirote Chonwiriyaikul, HansaThitipoka, Sumalee Lai rungreung and Chettapong Nontapan	Indigenous chicken production in the farming systems of rain-fed areas	Department of Livestock Development	Research	1988	Proceedings of the 2nd seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand 1988.	M
19	Cherdchai Ratanasetthakul, Wansa Suksawat, Pornchai Sombatchaisak and Orawan Pisansarakit	Increasing protein and additional income for Prathom Suksa IV students in the village by native chicken raising.	Khon Kaen University		1991	Annual report, Khon Kaen University	M

No	Authors	Title	Institutions	Paper type	Year	Source	Category
20	nkuan Panyawee and	Growth rates of Crossbreds of Indigenous chicken x Rhode Island Red, Indigenous chicken x Barred Plymouth Rock, Indigenous Chicken x Chiang Mai 1, and Indigenous chicken x Chiang Mai 2 under village conditions	Department of Livestock Development		1996	J. Animal husbandry Vol 6. No. 33. May-June,1996	M/B
21	Kreingkrai Choprakarn, Watcharapong Wattanakul, Kitti Wongpichet, and Worapong Suriyachantratong	Development of Thai indigenous chickens and crossbred of Thai indigenous chickens production: A review of the literature.	Ubon Ratchanthani University	Reviewed literature	1998	Technical report submitted to Thailand Research Fund. 52 pp.	M
22	Amnuay Leotaragul and Onanong Pimkumlai	Economic returns of the production of Indigenous chicken and Crossbreds of Indigenous-Rhode Island Red	Department of Livestock Development	Research	1999	J. Animal husbandry (5th Regional).Vol 3. No. 1 Febuary-June,1999	M/B
23	Porntipa Lekchareonsuk, Chalermpon Lekchareonsuk, Tipawan Thanapaisan and Wantanee Thommued.	The role of vaccine for highly pathogenic Avian Influenza (HPAI) subtype H5N1 control in poultry in Thailand.	Kasetsart University	Document	2006	The Ammarin Printing & Publishing Company. Thailand. 93 pp.	D

## Bibliography of papers in English

### Categories:

B= Breed, characteristic of Thai indigenous chickens (TIC) and productivities of other breeds compare to TIC

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F= Feeds and feeding for TIC and TIC crossbred

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No	Authors	Title	Institutions	Paper type	Year	Source	Category
1	Kanok Phalarask, Suwit Theerapantuwat and Lerchart Boon-ek	Village Data on the Native Chicken in the North-east	Khon Kaen University	Research	1979	Annual report, Khon Kaen University.	M
2	Vichitr Sukhapesa	Anthelmintic activity of piperazine citrate against <i>Ascaridia galli</i> in chicks.	Department of Livestock Development	Research	1983	Proceedings of the First Seminar on Thai Indigenous Chickens. North-eastern Regional Office of Agriculture, Khon Kaen.	D
3	Niyomsak Upatoom, Kreingkrai Choprakarn, Somchai Srihakim, Wimolporn Thatisak, Banchorn Likitdecharoj, Ruenrudee Bunyahotra, Piyawan tassanasorn and Surat Somsatikul	Marek's disease in native chickens.	Department of Livestock Development	Research	1983	Proceedings of the First Seminar on Thai Indigenous Chickens. North-eastern Regional Office of Agriculture, Khon Kaen.	D
4	Vichitr Sukhapesa	A study of natural parasitic infection in native chickens.	Department of Livestock Development	Research	1983	Proceedings of the First Seminar on TIC. North-eastern Regional Office of Agriculture, Khon Kaen.	D

No	Authors	Title	Institutions	Paper type	Year	Source	Category
5	Banyat Laopaiboon, Ampon Haonak and Taweasuk Santaweesuk	Study on the comparative performance of native, broiler and crossbred chickens.	Khon Kaen University	Research	1983	Proceedings of the First Seminar on Thai Indigenous Chickens. North-eastern Regional Office of Agriculture, Khon Kaen.	B
6	Niyomsak Upatoom, Wimolporn Thitisak, Lertrak Srikijsakarn, Vimol Jirathanawat, Nimit Leessirikul, Ruenrudee Bunyahotra, Manvika Karakovida and Somchai Srihakim	Poultry disease in the northeast.	Department of Livestock Development	Research	1983	Proceedings of the First Seminar on Thai Indigenous Chickens. North-eastern Regional Office of Agriculture, Khon Kaen.	D
7	Kanok Phalarask	The improvement of backyard poultry production on village level of the settlements in N.E.	Khon Kaen University	Research	1985	Annual report, Khon Kaen University.	M
8	Cherdchai Ratanasetthakul, Banyat Laopaiboon and Sumalee Ratanapunya	Study of Newcastle disease vaccination one to four times a year in native chickens raised in the village.	Khon Kaen University		1986	Annual report, Khon Kaen University.	D
9	Cherdchai Ratanasetthakul, Banyat Laopaiboon, Prayoon Udomsiang, Suvat Jitpraneechai	Improvement of native chicken raising in rural areas.	Khon Kaen University	Research	1987	Annual report, Khon Kaen University.	M
10	Kanjana Bansiddhi	A study of protein and energy requirements of native chicken in Northeast Thailand.	Ubon Ratchanthani University	Research	1988	Annual report, Research and Development Institute, Khon Kaen University	F

No	Authors	Title	Institutions	Paper type	Year	Source	Category
11	Kreingkrai Choprakarn, Sarote Kachareon, Kanok Phalarask, Cherdchai Rattanasethakul, and Worapong Suriyachantratong.	Stimulation of egg production in Thai indigenous chickens by separation of the hen from her broods.	Ubon Ratchatani university	Research	1988	J. of ISSAAS. 4: 115-122.	M
12	Cherdchai Ratanasetthakul, Pichet Leungtongkum, Wansa Suksawat, Prapaporn Tungthanathanich, Narong Kitpanich, Weerasak Wongsrikeao, Paiboon Buranarugsa and Reing Muangdit	Parasitic control in native chicken raise in the villages in Khon Kaen province.	Khon Kaen University	Research	1989	Annual report, Khon Kaen University.	D
13	Sumalee Ratanapunya, Kanlaya Suawanphesat, Sukesinee Supatheera, Wirote Patarachinda and Somchai Srila	A Study of an On-trial Testing of a Back Yard Chicken Vaccination: A Case Study in Natural Environment of Nine Accelerated New Settlement Villages of Kham Soi in Mukdaharn and of Lum Pour in Kalasin Province.	Khon Kaen University	Research	1989	Annual report, Khon Kaen University.	M/D
14	Watchira Kwaengsopha	Application of Knowledge and Technology in the Native Chicken Production of Farmers in Changwat Phetchaburi.	Kasetsart University	Thesis	1989	Kasetsart University	M

No	Authors	Title	Institutions	Paper type	Year	Source	Category
15	Arkom Sangvaranond	Study on extoparasites of native chickens in Phisanulok province, Thailand.	Kasetsart University		1990	J. Thai. Vet. Med. Assoc. Vol. 41 No. 4 December	D
16	Arkom Sangvaranond	Study on external parasites of native chickens in Chonburi province, Thailand.	Kasetsart University		1990	J. Thai. Vet. Med. Assoc. Vol. 41 No. 4 December 1990	D
17	Arkom Sangvaranond	Study on external parasites of native chickens in Saraburi province, Thailand.	Kasetsart University		1990	J. Thai. Vet. Med. Assoc. Vol. 41 No. 2 June 1990	D
18	Monticha Boonmerod	The Effect of low protein diets to 0-12 weeks crossbreed of Thai Native chicken and Taiwan dark meat chicken for reduced cost of production.	Kasetsart University	Thesis	1990	Kasetsart University	F
19	Vichitr Sukhapesna	Anthelmintic activity of Betel Nut against endoparasites in native chicken.	Department of Livestock Development		1991	J. Thai. Vet. Med. Assoc. Vol. 42 No. 2 June 1991	D
20	Arkom Sangvaranond	Incidence and outbreak of external parasites of native chickens in Surin province.	Kasetsart University		1992	J. KKU.Vet. Sci. Vol. 2 No.1 January - June 1992	D
21	Voravit Siripholvat and Suchart Sangunphan	Effect of protein level to the growth rate of tree-breed chickens.	Kasetsart University	Research	1992	J. of Agriculture 26 : 393 - 399,1992	B/F
22	Arkom Sangvaranond and Kiattisak Limsuwet	Study on ectoparasites occurring on native chickens on Buri Ram province.	Kasetsart University		1993	J. KKU.Vet. Vol. 3 No.1 - 2 January - December 1993	D

No	Authors	Title	Institutions	Paper type	Year	Source	Category
23	Tanada Sopajitr	Factors affecting farmers' adoption of technology in the increasing the production of home-raised chicken through vaccination project Changwat Maha Sarakham	Kasetsart University	Thesis	1993	Kasetsart University	M
24	Somnuek Wisuttipongtarvorn	Methionine requirement of suwan-6 crossbred native chicken at 0-6 Weeks of Age.	Kasetsart University	Thesis	1994	Kasetsart University	F
25	Paitoon Cinpromarat	Effect of replacement of sunflower seed for soybean meal in the crosses between native chicken and Rhode island red.	Maharakham University	Thesis	1994	Maharakham University	B/F
26	Kiattisak Limsuwate	Studies on prevalence and outbreak of ectoparasites in adult native chickens in north-eastern part of Thailand.	Kasetsart University	Thesis	1994	Kasetsart University	D
27	Amnuay Leotaragul, Patcharin Sondhiproj and Siripun Morathop	Breeding and selection of native chickens of Maharakham livestock breeding station II. Productive performance of native chickens raised in livestock breeding station.	Department of Livestock Development	Research	1996	J. of Agriculture 12(1) : 55 - 64	B

No	Authors	Title	Institutions	Paper type	Year	Source	Category
28	Anucha Seanbudda, Sawang Kedangsakonwut, Jiroj Sasiprccyajan and Thawat Lekdumrongsak	Vaccination program for infectious bursal disease in native Thai chickens.	Chulalongkorn University	Special topic of Undergrad	1998	Chulalongkorn University	D
29	Teerawat junpoang, Rachain Kawruang and Wilai Sunaruk	Susceptibility of Gumboro disease in broiler, layer and native Thailand chickens.	Chulalongkorn University	Special topic of Undergrad	1998	Chulalongkorn University	D/B
30	Kreingkrai Choprakarn, Intr Salangam and Katuhide Tanaka	Laying performance, egg characteristics and egg compositions in Thai Indigenous Hens.	Ubon Ratchanthani University	Research	1998	J. of the National Research Council of Thailand. Vol 30. No 1/2, January - December, 1988.	M
31	Amnuay Leotaragul, Onanong Pimcomelai and Siripun Morathop	Economic returns of raising crossbred native-Rhode Island Red under different diets and durations.	Department of Livestock Development	Research	1998	J. of Agriculture 14(2) 165 - 175 (1998)	M/B
32	Kreingkrai choprakarn, Intr Salangam, Hiroshi Ogawa, Takehito Kuwayama and Katuhide Tanaka	Development of ovarian follicles during the period of the rapid growth period in Thai indigenous chickens	Ubon Ratchathani university	Research	1998	Proceedings of International Seminar on Development of Agribusiness and its impact on Agricultural production in South East Asia: DABIA III, 14-19 November, 1998. Tokyo University of Agriculture. Tokyo, Japan.	B

No	Authors	Title	Institutions	Paper type	Year	Source	Category
33	Kreingkrai choprakarn, Intr Salangam and Katuhide Tanaka	Laying pattern, time of ovulation and oviposition in Thai indigenous chickens	Ubon Ratchathani university	Research	1998	Proceedings of International Seminar on Development of Agribusiness and its impact on Agricultural production in South East Asia: DABIA III, 14-19 November, 1998. Tokyo University of Agriculture. Tokyo, Japan.	B
34	Banyat Laopaiboon, Pitcharat Sanchaisuriya and Kanlaya Chuachan	Study on productive performance of native crossbred chicken: I. Reproductive performance.	Khon Kaen University		1999	J. KKU.Vet. Vol. 9 No.1 January - June 1999	M/B
35	Banyat Laopaiboon, Pitcharat Sanchaisuriya, Kanlaya Chuachan and Kitti Kubkaew	Study on productive performance of native crossbred chicken: II. Growth performance.	Khon Kaen University		1999	J. KKU.Vet. Vol. 9 No.1 January - June 1999	M
36	Amnuay Leotaragul	Heritability, genetic and phenotypic correlation for prelaying production performance in Thai indigenous chickens.	Department of Livestock Development	Research	1999	J. Animal husbandry (5th Regional).Vol 2. No. 1 Febuary- June,1999	B
37	Somkuan Punyavee, Amnuay Leotaragul and Prasan Jeungyusook	Egg production and oviposition time of some pure breed hens.	Department of Livestock Development	Research	1999	J. Animal husbandry (5th Regional).Vol 2. No. 1 Febuary- June,1999	B
38	Piyamas Karnsomdee	Genetic variations of Thai native fowls <i>Gallus gallus domesticus</i> based on microsatellite DNA.	Chulalongkorn University	Thesis	1999	Chulalongkorn University	B

No	Authors	Title	Institutions	Paper type	Year	Source	Category
39	Yaowaluck Lephajit	Estimation the genetic similarity between indigenous and exogenous chicken by microsatellite-PCR technique.	Kasetsart University	Thesis	2000	Kasetsart University	B
40	Chaiyaporn Soikum, Pichet Leungtonkum, Wasan Chanharasanit, Pirat Solplang and Varunee Ratanaporn	A study of basic problem of poultry raising in the village.	Khon Kaen University		2000	J. KKU.Vet. Vol. 10 No. 1 - 2 January-December, 2000	M
41	Anucha Saengsophon, Ronachai Sitthigripong, Pongsak Srithaneadchai and Kanokrat Srikitkasamewat	Affect of <i>Andrographis paniculata</i> in the performance of broiler and native crossbred chickens.	King Monkut's Institute of Technology Ladkrabang	Research	2000	J. of King Monkut's Institute of Technology Ladkrabang. Vol 3. No. 2. August, 2000.	F/B
42	Watee Kongbuntad, Worapol Aengwanich and Noppakun Pakdeenarong	The effects of White Gwow Kerur ( <i>Pueraria mirifica</i> ) on reproductive system of native chicken.	Maharakham University	Research	2000	Annual report, Maharakham University	F
43	Onanong Leotaragul	Raising conditions and some phenotypic diversity traits of native chickens.	Department of Livestock Development	Research	2000	J. Animal husbandry (5th Regional). Vol 3.No. 1 June-September, 2000	B
44	Somkuan Punyavee, Siripan Morathop and Suchon Tangtaweewipat	Comparison of carcass composition in some pure-bred chickens.	Department of Livestock Development	Research	2000	J. Animal husbandry (5th Regional). Vol 3.No. 1 June-September, 2000	B
45	Jumlong Pookduang, Pisai Wongpanit and Yod Srison	Influence of seasons and years on natural hatching in Thai native chicken.	Department of Livestock Development	Research	2000	J. Animal husbandry (5th Regional). Vol 3.No. 1 June-September, 2000	M
46	Srisamai Chotivanich, Boonguar Pinprasonf and Chuthamart	Pullorum disease of native chicken in Chaiyaphum province.	Department of Livestock Development	Research	2000	J. Animal husbandry (5th Regional). Vol 3.No. 1. June-	D

No	Authors	Title	Institutions	Paper type	Year	Source	Category
	Somchai					September, 2000	
47	Mitre Kasibut	Factors Affecting the Production Efficiency of Raising Thai Native Cross-bred Chicken of the Farmers in the Poultry Dissemination project, Changwat Lop Buri.	Kasetsart University	Thesis	2000	Kasetsart University	M/B
48	S. Kunhareang J. Kanjannaruthipong, V. Hongtrakul and V' Siriponvat	Investigation of DNA markers associated with broodiness in the backcross population of Native and Layer Chicken	Khon Kaen University	Research	2000	Proceedings of the National Agriculture Seminar, Animal Science, Khon Kaen University.	B
49	Pisek Rochanavibhata and Anake Comebhibal	Treatment of plantar corns in native chicken in Phrae province.	Department of Livestock Development	Research	2001	J. Animal husbandry (5th Regional). Vol 4.No. 1. October-January, 2001	D
50	AnChalee Nettagul and Watee Kongbuntud	Effects of Phar Ta Laai Joan ( <i>Andrographis paniculata</i> (Burm.f.) Nee) on blood cells in the native chickens.	Maharakham University	Research	2001	Annual report, Maharakham University	F
51	Tawat Chinrasri, Orawan Chinrasri, Worapol Aengwanich and Kasidet Somboonrat	Studies on outbreak of endoparasites in native chickens in Northeast Thailand.	Maharakham University	Research	2001	Annual report, Maharakham University	D
52	Taweesilp Jeendoung, Amnuay Leotaragul and Onanong Leotaragul	Body weight, daily gain and body conformation of crossbred Native-Rhode Island Red-Barred Plymouth Rock chickens.	Department of Livestock Development	Research	2001	J. Animal husbandry (5th Regional). Vol 3.No. 3. February-May, 2001	B

No	Authors	Title	Institutions	Paper type	Year	Source	Category
53	Suparat Srisuai	Estimation of genetic parameters of economically important traits in Thai indigenous chickens.	Kasetsart University	Thesis	2002	Kasetsart University	B
54	Siripun Morathop, Charay Limwattana and Amnuay Leotaragul	Selection and improvement regional native chickens (Cheefah chickens) for raising in the northern highland of Thailand. 1. Productive performance and genetic parameter of cheefah chickens at generation 1.	Department of Livestock Development	Research	2002	J. Animal husbandry (5th Regional). Vol 5.No. 1. October-January, 2002	B
55	Amnuay Leotaragul, Surasak Sophonchit and Supralerk Saithong	Selection and improvement regional native chickens (Maehongson chickens) for raising in the northern highland of Thailand. 1. Productive performance and genetic parameter of Maehongson chickens at generation 1.	Department of Livestock Development	Research	2002	J. Animal husbandry (5th Regional). Vol 5.No. 1. October-January, 2002	B
56	Kannika Sakulkaew, Maliwan Wareesri and Kanokparn Pimolsiri	Antimicrobial resistance of Enterococci isolated from faeces of native chicken and broilers and prevalence of vancomycin resistance Enterococci.	Chulalongkorn University	Special problem of Undergrad	2002	Chulalongkorn University	D

No	Authors	Title	Institutions	Paper type	Year	Source	Category
57	Khemmapat Boonyo, Jukkrit Eakvijit and Numchai Chakornmettakul	Prevalence of Salmonella and Enterococci from native chicken meat and their antimicrobial resistance patterns.	Chulalongkorn University	Special problem of Undergrad	2002	Chulalongkorn University	D
58	Peerasak Sompracone, Sirithep Suwannasri and Harnchai Vongchagkaew	Study of antimicrobial resistance patterns of <i>Salmonella</i> isolated from faeces of native chicken and broilers in Thailand.	Chulalongkorn University	Special problem of Undergrad	2002	Chulalongkorn University	D
59	Bundist Kiratikrankul, Petai Pongpiachan and Puntipa Pongpiachan	Effect of Active Immunization against Somatostatin Hormone on Growth and Body Fat Quantity in Native Chicken.	Chiang Mai University	Research	2002	J. of Agriculture 18(1) 56 - 66 (2002)	M
60	Kreingkrai choprakarn, Intr Salangam, Chaliaw Boonman and Wichan Kaewleun	Effect of protein levels and stocking densities on performance and carcass composition of Thai indigenous chickens	Ubon Ratchathani university	Research	2002	J. ISSAAS vol. 7: 1-8	M
61	Kham Phommachan	The effects of herbal choice feeding on growth performance and carcass characteristics of Betong chicken.	Kasetsart University	Thesis	2003	Kasetsart University	F
62	Nirat Gongruttananun and Ratana Chotesangasa	Effects of dietary sodium bicarbonate supplementation on eggshell quality and hatchability in native hens.	Kasetsart University	Research	2003	Annual report, Kasetsart University	F

No	Authors	Title	Institutions	Paper type	Year	Source	Category
63	Narin Tongwittaya and Chalermpon Boonjue	Protein Requirements of Laying Hen.	Maejo University	Research	2003	Proceedings of the 4th Animal Science Conference, December 18 - 19, 2003 Chiangmai University, Thailand	F
64	Jennarong Kammaongkun, Neramit Sookmanee, Premjai Trisaranuwatana and Voravit Siripholavat	Estimation of Genetic Parameters for Body Weight in Thai Indigenous Chicken.	Kasetsart University	Research	2003	Proceedings of the 4th Animal Science Conference, December 18 - 19, 2003 Chiangmai University, Thailand	B
65	Sanchai Jaturastitha, Assawin Soontornneth, Angkana Phongphaew, Amnuay Leotaragul, Suparuag Saitong, Tusanee Apichatsrungkoon, Varaporn Leangwunta and Nutdhapat Longani	Effect of Farm, Sex, Weight and Muscle on Fat Quality of Hybrid Chickens (Gai Baan Thai)	Chiang Mai University	Research	2003	Proceedings of the 4th Animal Science Conference, December 18 - 19, 2003 Chiangmai University, Thailand	M
66	Assawin Soontornneth, Sanchai Jaturastitha, Angkana Phongphaew, Nakarin Pripwai, Varaporn Leangwunta, Amnuay Leotaragul, Suparuag Saitong and Tusanee Apichatsrungkoon	Effect of Different Two Commercial Farms on Direct Meat Quality of Hybrid Chicken (Gai Baan Thai)	Chiang Mai University	Research	2003	Proceedings of the 4th Animal Science Conference, December 18 - 19, 2003 Chiangmai University, Thailand	M

No	Authors	Title	Institutions	Paper type	Year	Source	Category
67	Worapon Aengwanich	Effect of heat stress on blood biochemistry, haematology, electrolyte and pathophysiology in Thai indigenous chickens, Thai indigenous chickens crossbred and broilers.	Maharakham University	Research	2003	Technical report submitted to Thailand Research Fund. 126 pp.	B
68	Parichart Srijumroen	Estimation of genetic variation in Thai native chicken ( <i>Gallus gallus domesticus</i> ) by microsatellite-PCR technique.	Kasetsart University	Thesis	2004	Kasetsart University	B
69	Jiraporn pancharoen	A comparative study of DNA bands between broodiness and no broodiness in hens.	Kasetsart University	Thesis	2004	Kasetsart University	B
70	Apassara Choothesa, Choosri Sribhen, Taveesak Songserm and Sommai Homswart	Study of phenotypes of haemoglobin in Thai native cocks.	Kasetsart University	Research	2004	Annual report, Kasetsart University	B
71	Suvit Terapuntuwat, Sasipan Wongsutthavas, Kullayanee Srinon, Kulab Saetung, Jiraporn Chulanon, Chalwarit Mapato	Influence of Stocking Density on Growth Performance and Meat Quality in Broiler, Native Chicks and Layer	Khon Kaen University	Research	2004	Proceedings of the Animal Science Conference, 2004 Faculty of Agriculture, Khon Kaen University, Thailand	M
72	Rujeerat Worasing, W' Kongkeaw, S. Nithiuthai and N. Sihamart	Preliminary Report of Microfilaria from Chicken on Southern Thailand	Department of Livestock Development	Research	2004	Proceedings of the Animal Science Conference, 2004 Faculty of Agriculture, Khon Kaen University,	D

No	Authors	Title	Institutions	Paper type	Year	Source	Category
						Thailand	
73	Devirat Sritong	Anthelmintic efficacy of <i>Diospyros maoois</i> , <i>Combretum quadragulare</i> , <i>Euphorbia heterophylla</i> and <i>Cucurbita moschata</i> on adult <i>Ascaridia galli</i> in native chicken and layers.	Kasetsart University	Thesis	2005	Kasetsart University	D
74	Suntron Sunathai, Sarawut Sringam, Adisak Sangkaew, Apichai Poolchai and Kungwan Kajanapongkit	Semen quality of Thai indigenous chicken after diluted and preservation in BPSE, Egg yolk-Tris and Kiev extenders.	Department of Livestock Development	Research	2005	J. KKU.Vet. Vol. 15 No. 1 January - June, 2005	B
75	Surasit Aunpromma, Keeratikor Kamapanai, Worakarn Jantakhate and Hneungnuch Saipin	Effect of ivermectin on flea infestation in native chickens.	Khon Kaen University	Article	2005	J. KKU.Vet. Vol. 15 No. 1 January - June, 2005	D
76	Wasan Jantarasanit, Sunpetch Angkittrakul, Pitak Noimay and Varunee Ratanaphon	Effect of <i>Psidium guajava</i> Linn. Leaf crude extract on inhibition of <i>Salmonella</i> Enteritidis in native cross breed chicken.	Khon Kaen University		2005	J. KKU.Vet. Vol. 15 No. 1 January - June, 2005	F/D
77	Surarit Kanchanakachin	Molecular marker development from a plumage colour gene, <i>MC1-R</i> , for classifying Thai indigenous chicken.	Kasetsart University	Thesis	2005	Kasetsart University	B

No	Authors	Title	Institutions	Paper type	Year	Source	Category
78	Nguyen Ventuan	Effects of dietary protein and energy on growth performance and carcass characteristics of betong chickens.	Kasetsart University	Thesis	2005	Kasetsart University	F
79	Supunsa Penmas	Estimation of growth curve and genetic parameters for growth traits in Thai Native Chicken (Praduhangdum breed)	Chulalongkorn University	Thesis	2005	Chulalongkorn University	B
80	Supamit Mekchay, Amnuay Leotaragul, Anchali Wongsas and Patcharin Krutmuang	Molecular Marker-based Genetic Diversity Assessment of Thai Native Chicken and Broiler Chicken.	Chiang Mai University	Research	2005	Tropentag 2005, Stuttgart - Hohenheim, October 11 - 13, 2005	B
81	Usa Klinhom, Chaichan Wongsaman, Sajee Kanhareing, Sunee Treemane, Sophon Suekaew, Pornchai Utarask, and Kuakool Pimdee	Native chicken production and management by using indigenous knowledge in the northeast of Thailand.	Maharakham University	Research	2005	Technical report submitted to Thailand Research Fund. 70 pp.	M
82	Chancharat Reodecha and Kreingkrui Choprakarn	Avian Influenza and its impacts on poultry diversity in Thailand.	Chulalongkorn University	Reviewed literature	2005	Options and strategies for the conservation of farm animal genetic resources. Workshop document, November 7-10, France.	D/B
83	Department of Livestock Development	Avian influenza control in Thailand	Department of Livestock Development	Technical report	2005	Department of Livestock Development. 2005. Avian influenza	D

No	Authors	Title	Institutions	Paper type	Year	Source	Category
						control in Thailand. 153 pp.	
84	Chanin Tirawattanawanich, Dhanirat Santivatr, Vorasak Patchimasiri and Virat Nimitsantivong.	Influences of genetic and tropical climate factors on stress and functions of non-specific, cell-Mediated, and humoral immune systems in native, hybrid and commercial chickens.	Kasetsart University	Research	2005	Technical report submitted to Thailand Research Fund. 42 pp.	B
85	Jumrus Jailungka, Onanong Pimkumlai, Jarun Jailungka and Amnuay Leotaragul	Egg and chick production and losses rate of Thai indigenous chickens raising in a village of Chiang mai.	Department of Livestock Development	Research	2006	J. Agriculture of Naresuan University. Vol 10. No1. (October 2006-March 2007)	M
86	Kanjana Bansiddhi, Dherapol Bansiddhi, Intr Salangam, Chaliaw Boonman and Wichan Keawluan	Effects of protein and energy levels on nutrients utilization of native chicken hens.	Ubon Ratchanthani University	Research	2006	UBU Journal. Vol 8. No. 3 (September-December 2006)	F/B
87	Amnuay Leotaragul and Chaiwat Pinyatepratan	Formation of foundation stock of Pradu Hangdum Breed of Thai indigenous chicken 8. Breed standards of Pradu Hangdum chicken generation 3.	Department of Livestock Development	Research	2006	J. Animal husbandry. Vol11. No. 23 (April-September 2006)	B
88	Angkana Akabut, Monchai Duangjinda, Banyat Laupaiboon and Sagee Gunhareng	Classification of Thai Native Chicken by Microsatellites	Khon Kaen University	Research	2006	Proceedings of the 2nd Animal Science Conference, 24 January, 2006. Faculty of Agriculture, Khon	B

No	Authors	Title	Institutions	Paper type	Year	Source	Category
						Kaen University, Thailand	
89	Sagee Gunhareang, Banyat Laopaiboon, Thevin Vongpralub, Puntip Ketkaew and Warangkana Dansrikaew	Study on Laying Performance, Egg Components and Fertile Period Post Insemination of the Native Hens	Khon Kaen University	Research	2006	Proceedings of the 2 nd Animal Science Conference, 24 January, 2006. Faculty of Agriculture, Khon Kaen University, Thailand	B
90	Tawatchai Teltathum, Supamit Mekchay and Amnuay Leotaragul	Proteomic Analysis in <i>Pectoralis</i> Muscle of Thai Indigenous Chicken: Changes in Proteins Expression during Growth Periods	Chiang Mai University	Research	2007	Conference Proceeding the 8th Asian Pacific Poultry Conference, March 5 - 6, 2003 Bangkok, Thailand(348 - 351)	B
91	Supamit Mekchay	Functional Genomic Analysis of Thai Native Chicken Muscle	Chiang Mai University	Research	2007	Conference Proceeding the 8th Asian Pacific Poultry Conference, March 5 - 6, 2003 Bangkok, Thailand(356 - 359)	B
92	Panthporn Supakankul, Supamit Mekchay and Amnuay Leotaragul	Association of MC4R Polymorphisms with Performance Traits in Thai Indigenous Chickens	Chiang Mai University	Research	2007	Conference Proceeding the 8th Asian Pacific Poultry Conference, March 5 - 6, 2003 Bangkok, Thailand(360 - 363)	B
93	Tianchai Ounban and Supamit Mekchay	AFLP Analysis for Growth Traits in the Thai Indigenous Chicken	Chiang Mai University	Research	2007	Conference Proceeding the 8th Asian Pacific Poultry Conference, March 5 - 6, 2003 Bangkok, Thailand(364 - 366)	B

No	Authors	Title	Institutions	Paper type	Year	Source	Category
94	Theeachai Chormai, Chaleumpol Boonjear and Udomsri Intrachote	Formation of Foundation Stock of Thai Indigenous Chicken (Lueng Hangkhao) 2. Productive Performance and Genetic Parameter of Body Weight in Chicken	Department of Livestock Development	Research	2007	Proceedings of the 3rd Animal Science Conference, 24 January, 2007.	B
95	Amnuay Leotarakul, Darunee Na Rangsi, Tawee Oboun and OnanongPimcomelai	Formation of Foundation Stock of Thai Indigenous Chicken (Pradu Hangdum) 9. Reproductive Performance in Local Condition of the Chicken	Department of Livestock Development	Research	2007	Proceedings of the 3rd Animal Science Conference, 24 January, 2007.	B
96	Pornjit Sonseeda, Julanee Nuamjit, Yupin Phasook and Thevin Vongpralub	The Effect of Storage /time on the Fertilizing Capacity of Native Cock Diluted Semen.	Khon Kaen University	Research	2007	Proceedings of the 8th Veterinary Science Conference, 7-8 June, 2007.	B
97	Wirot Likittrakulwong, Voravit Siripholvat and Neramit Sookmanee	Using PCR Technique to Detect Very Low Density Lipoprotein Receptor in Commerce Breeds and Three Yellow Breeds	Kasetsart University	Research	2007	Proceedings of the 3rd Animal Science Conference, 24 January, 2007.	B
98	Thevin Vongpralub, Yupin phasuk, Banyat Laopaiboon, Julanee Noumsuk and Pornjit Sonsrida	Effect of various extenders on cock semen quality.	Khon Kaen University	Research	2007	Proceedings of the 3rd Animal Science Conference, 24 January, 2007.	B

No	Authors	Title	Institutions	Paper type	Year	Source	Category
99	Thevin Vongpralub, Banyat Laopaiboon, Pitcharat Sanchaisuriya, Sajee Kunhareang, Sarawut Seignam and Yupin Phasuk	Effect of extenders and cryoprotectant on stored semen quality of native cock.	Khon Kaen University	Research	2007	Proceedings of the 3rd Animal Science Conference, 24 January, 2007.	B
100	Thevin Vongpralub, Banyat Laopaiboon, Pitcharat Sanchaisuriya, Sajee Kunhareang and Yupin Phasuk	Study on fertility of native cock semen after artificial insemination.	Khon Kaen University	Research	2007	Proceedings of the 3rd Animal Science Conference, 24 January, 2007.	B
101	Sutha Watanasit, Chaiyawan Wattanachant and Saowakon Wattanachant	Effect of rearing system and gender on growth performance and characteristic of Southern Thai indigenous chicken (Kai Dang)	Prince of Songkla University	Research	2007	Proceedings of the 3rd Animal Science Conference, 24 January, 2007.	M
102	Kreingkrai Choprakarn	Thai indigenous chickens: Before and after Avian Influenza out break	Ubon Ratchatani university	Reviewed paper	2007	Proceedings of the World's Poultry Science Association. Asian Pacific Federation Working Group on Small-scale Family Poultry Farming Symposium. March 2007. Bangkok, Thailand.	D/M
103	Suchint Simarak, Vichien Kerdsuk, Waraporn Kerdsuk, Patarapong Kreksakul.	Outcome of Thai indigenous chicken development of small-scale farmer in north-eastern region on the past.	Khon Kaen University	Research	2007	Technical report submitted to Thailand Research Fund. 175 pp.	M

## Bibliography of papers on websites

### Categories:

B= Breed, characteristic of Thai indigenous chickens (TIC) and productivities of other breeds compare to TIC

D= Diseases and disease control including parasites

F= Feed and feeding for TIC and TIC crossbred

M= Productivities of TIC and TIC crossbred under traditional method and modern technologies, and extension

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
1	Kanok Palaruk, Narong Kitpanit, Suvat Jitpraneechai and Prasit Prakongsri	The study of method of native chicken raising improvement.	Khon Kaen University	Research	1978	<a href="http://202.28.18.233/dcims/basic.php?institute_code=92&amp;option=show&amp;bib=7215&amp;query=%20&amp;doc_type=0">http://202.28.18.233/dcims/basic.php?institute_code=92&amp;option=show&amp;bib=7215&amp;query=%20&amp;doc_type=0</a>	M
2	Kanok Palaruk, Prasit Prakongsri, Narong Kitpanit and Suvat Jitpraneechai	An evaluation of native chicken raising improvement.	Khon Kaen University	Research	1979	<a href="http://202.28.18.233/dcims/basic.php?institute_code=92&amp;option=show&amp;bib=7215&amp;query=%20&amp;doc_type=0">http://202.28.18.233/dcims/basic.php?institute_code=92&amp;option=show&amp;bib=7215&amp;query=%20&amp;doc_type=0</a>	M
3	Cherdchai Ratanasethakul	Vitamin A deficiency in native chickens.	Khon Kaen University	Research	1981	<a href="http://kucon.lib.ku.ac.th/FullText/KC1903009.pdf">http://kucon.lib.ku.ac.th/FullText/KC1903009.pdf</a>	D
4	Nop Supanyatham, Suporn Ehlers Bhodigen, Tanawat Nantamingcharern and Manop Muangyai	A survey of parasites in native chickens.	Chulalongkorn University	Research	1982	<a href="http://kucon.lib.ku.ac.th/kucon/index.html">http://kucon.lib.ku.ac.th/kucon/index.html</a>	D

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
5	Cherdchai Ratanasethakul and Banyat Loupaibol	Studies in disease resistance on indigenous chickens 2. Resistance to Newcastle disease.	Khon Kaen University	Research	1982	<a href="http://kucon.lib.ku.ac.th/FullText/KC2003017.pdf">http://kucon.lib.ku.ac.th/FullText/KC2003017.pdf</a>	D
6	Vichitr Sukhapesna, Cherdchai Ratanasethakul and Kriengkrai Choprakarn	Anthelmintic activity of Mebendazol against endoparasites in native chickens.	Department of Livestock Development	Research	1984	<a href="http://kucon.lib.ku.ac.th/FullText/KC2203011.pdf">http://kucon.lib.ku.ac.th/FullText/KC2203011.pdf</a>	D
7	Cherdchai Ratanasethakul	Pathological study of lymphoid leucosis in laying and native chickens.	Khon Kaen University	Research	1984	<a href="http://kucon.lib.ku.ac.th/FullText/KC2203007.pdf">http://kucon.lib.ku.ac.th/FullText/KC2203007.pdf</a>	D
8	Cherdchai Ratanasetthakul, Satis Pholpark, Banyat Laupaiboon, Manvika Polpark and Darunee Tuntasuvan	Studies of parasitic infection in native chickens in the Northeast.	Khon Kaen University	Research report	1984	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=7340&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=7340&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0</a>	D
9	Cherdchai Ratanasetthakul, Banyat Laupaiboon and Ruenrudee Boonyahotra	Studies of simultaneous administration of several vaccines in native chickens.	Khon Kaen University	Research report	1984	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=7370&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=7370&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0</a>	D
10	Kreingkrai Choprakarn, Worapong Suriyajantratong, Osoth Naksakul, Pittaya Narmdang and Udon Senakarn	A preliminary study on growth rate of native and native x Rhode island red crossbred chicken.	Ubon Ratchathani University	Research	1985	<a href="http://www.dld.go.th/nutrition/Research_Knowlage/RESEARCH/research_full/2528/R2813-1.pdf">http://www.dld.go.th/nutrition/Research_Knowlage/RESEARCH/research_full/2528/R2813-1.pdf</a>	B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
11	Prachya Prachyalak, Sujittra Pongvivat, Chirawat Khemsawat, Chanchai Maneedul and Sawakon Rojanastid	Performance of Shianghai chicken and natives under conventional system of feeding.	Department of Livestock Development	Research	1985	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2528/R2812.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2528/R2812.pdf</a>	B
12	Cherdchai Ratanasethakul and Banyat Loupaibol	A study of Newcastle disease vaccine M.P. inoculation in native chickens challenged with Newcastle disease virus.	Khon Kaen University	Research	1985	<a href="http://kucon.lib.ku.ac.th/FullText/KC2303030.pdf">http://kucon.lib.ku.ac.th/FullText/KC2303030.pdf</a>	D
13	Pensawat Mayawes	Optimum protein levels on performance of the crosses between indigenous chicken and Rhode Island Red.	Khon Kaen University	Thesis	1985	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=10330&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=10330&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	F/B
14	Cherdchai Ratanasetthakul and Banyat Laupaiboon	Improvement of native chicken raising in the Northeast 1. disease prevention and ectoparasite control	Khon Kaen University	Research report	1986	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=7459&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=7459&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	D
15	Wasan Jantarasanit, Pichet Leungtonkum, Pirat Sornplang, Chaiyaporn Soikum and Varunee Lromna	Production half-bred native chicken from mother egg hens.	Khon Kaen University	Research report	1987	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=7524&amp;query=Native%20Chicken&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=7524&amp;query=Native%20Chicken&amp;doc_type=0</a>	B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
16	Chantana Kunjara, Srismai Kupopan, Kiti Srisuparbh and Dhanirat Santivatr	Study on salmonella carrier rate on native chickens.	Kasetsart University	Article	1987	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5049&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5049&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0</a>	D
17	Aruneepong Toomsan	Effect of protein levels and endoparasitic infestation on immune response to Newcastle disease vaccine in native chickens.	Khon Kaen University	Thesis	1988	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=9375&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=9375&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0</a>	D/F
18	Sumon Pojun, Prasert pojun and Sawakon Rojanastid	Utilization of dried leucaena leaf as protein source for native broiler.	Department of Livestock Development	Research	1988	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2531/R3102.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2531/R3102.pdf</a>	F
19	Prachya Prachyalak and Thalearnsak Nonthanavongs	Utilization of duckweed as feed Ingredient for native chicken.	Department of Livestock Development	Research	1988	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2531/R3101.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2531/R3101.pdf</a>	F
20	Kreingkrai Choprakarn	A Study on method to increase productivity of native chicken.	Khon Kaen University	Thesis	1988	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=9371&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=9371&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0</a>	M

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
21	Ratana Chotesangasa	Study of the native chicken: II Comparative study of growth and reproductive performance in Native x Leghorn, Native x Rhode Island Red, Leghorn and Rhode Island Red chickens raised in cages.	Kasetsart University	Research	1989	<a href="http://kucon.lib.ku.ac.th/FullText/KC2702003.pdf">http://kucon.lib.ku.ac.th/FullText/KC2702003.pdf</a>	B
22	Cherdchai Ratanasetthakul and Lerchart Boon-ek	Immune responses and resistance to challenge in native chickens vaccinated with Newcastle disease vaccine M.P. train	Khon Kaen University	Research report	1989	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=7633&amp;query=%E0%B7%9C%E0%B7%A0&amp;doc_type=Q">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=7633&amp;query=%E0%B7%9C%E0%B7%A0&amp;doc_type=Q</a>	D
23	Chinda Snitwong, Prachya Prachyalak and Thalearngsak Nothanavongs	Substitution of broken rice by the paddy rice for the ration of shianghai native chicken raising in confinement.	Department of Livestock Development	Research	1989	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2532/R3206.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2532/R3206.pdf</a>	F
24	Sunpet Boonlear	The studies of management techniques and levels of protein in diets for the improvement of native chicken production.	Khon Kaen University	Thesis	1989	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=9466&amp;query=%E0%B7%9C%E0%B7%A0&amp;doc_type=Q">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=9466&amp;query=%E0%B7%9C%E0%B7%A0&amp;doc_type=Q</a>	M/F
25	Prachya Prachyalak, Thalearngsak Nothanavongs and Noppawan Chaiyanukulkitti	Effects of low protein diets on performance of native - Sanghai chicken under confinement.	Department of Livestock Development	Research	1990	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2533/R3305.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2533/R3305.pdf</a>	B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
26	Banyat Laupaiboon	The comparative study of egg production performances of native and crossbred chickens	Khon Kaen University	Research report	1990	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=7734&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=7734&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0</a>	B
27	C. Ratanasetthakul, P. Leungtongkum, V. Sukitratanaorn and P. Tungtanatanit	Effect of parasite control on growth rate and antibody response to Newcastle vaccine in native chickens raised in the village.	Khon Kaen University	Research	1990	<a href="http://kucon.lib.ku.ac.th/FullText/KC2803002.pdf">http://kucon.lib.ku.ac.th/FullText/KC2803002.pdf</a>	D
28	Noppawan Chaiyanukulkitti, Thipa Punyavirhocha, Sumali Lairungreang and Chirawat Khemsawat.	Substitution of leuceana leafmeal by hedge lucern leafmeal in crossbred chicken diet.	Department of Livestock Development	Research	1990	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2533/R3311.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2533/R3311.pdf</a>	F
29	Tunyaporn Kiranuntavat	A study on the performance of crossbred native chickens with various raised in cages.	Surindra Rajabhat University	Research report	1991	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=21&amp;option=show&amp;bib=302&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=21&amp;option=show&amp;bib=302&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0</a>	B
30	Jaruk Biewkeb	Genetic influence on immunity development against Newcastle disease in the indigenous cross - bred chicken under condition.	Khon Kaen University	Thesis	1991	<a href="http://202.28.18.233/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=9669&amp;query=%E0%B9%A0&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=9669&amp;query=%E0%B9%A0&amp;doc_type=0</a>	B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
31	Santisuk Dangchand	Genetic influence on immunity development against infectious bronchitis disease in the indigenous cross - bred chicken under condition.	Khon Kaen University	Thesis	1991	<a href="http://202.28.18.233/dcims/basic.php?institute_code=92&amp;option=show&amp;bib=9674&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://202.28.18.233/dcims/basic.php?institute_code=92&amp;option=show&amp;bib=9674&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	D
32	Noppawan Chaiyanukulkiti, Sawakon Rojanastid, Sumon pojun and Anan Pusitigul	Nutrient recommendations for poultry 2) Native chicken (growing period).	Department of Livestock Development	Research	1991	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2534/R3411-1.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2534/R3411-1.pdf</a>	F
33	Pittaya Namdaeng	Factors contribution to mortality of indigenous chicken raising in Northeast Thailand.	Khon Kaen University	Thesis	1991	<a href="http://dcms.thailis.or.th/dcims/basic.php?institute_code=92&amp;option=show&amp;bib=9672&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://dcms.thailis.or.th/dcims/basic.php?institute_code=92&amp;option=show&amp;bib=9672&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	M
34	Dherapol Bansiddhi	A comparative study of tissues structures among native chickens and broiler-cross chickens (1) chemical composition and physical property of chicken meat in various ages.	Ubon Ratchanthani University	Research report	1992	<a href="http://dcms.thailis.or.th/dcims/basic.php?institute_code=100&amp;option=show&amp;bib=220&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://dcms.thailis.or.th/dcims/basic.php?institute_code=100&amp;option=show&amp;bib=220&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	B
35	Osoth Naksakul	Effects of dietary protein and methionine levels on growth performances of cross-bred native chicken.	Khon Kaen University	Thesis	1992	<a href="http://dcms.thailis.or.th/dcims/basic.php?institute_code=92&amp;option=show&amp;bib=9811&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://dcms.thailis.or.th/dcims/basic.php?institute_code=92&amp;option=show&amp;bib=9811&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	F

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
36	Panya Thammassal, Noppawan Chomchai and Prayoon Krongyuti	Utilization of oil palm meal as animal feed 2) For crossbred native chicken.	Department of Livestock Development	Research	1992	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2535/R3504.doc">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2535/R3504.doc</a>	F
37	Terdsak Khammeng, Pitcharat Sanchaisuriya, Aruneepong Srisathaporn, Sompong Chaiput, Pitak Sripraya and Jamorn Deethaworn	Brooding management of Thai native chicks.	Khon Kaen University	Research report	1992	<a href="http://202.28.18.233/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=7863&amp;query=1&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=7863&amp;query=1&amp;doc_type=0</a>	M
38	Viroje Wanasitchaiwat, Noppawan Chomchai, Somkid Khaewmeesri, Weera Narin and Sawakon Rojanastid	Improvement of native chicken raising in villages under Poo Pan project 1) Some aspects of native chicken raising.	Department of Livestock Development	Research	1992	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2535/R3503.doc">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2535/R3503.doc</a>	M
39	Tunyaporn Kiranuntavat	A study on appropriate ages in castration the crossbred native chickens.	Surindra Rajabhat University	Research report	1993	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=21&amp;option=show&amp;bib=246&amp;query=1&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=21&amp;option=show&amp;bib=246&amp;query=1&amp;doc_type=0</a>	B
40	Nirat Gongruttananun , Ratana Chotesangasa and Supaporn Isriyodom	Egg production and egg composition of the native compared with those other pure breed chickens.	Kasetsart University	Research	1993	<a href="http://kucon.lib.ku.ac.th/FullText/KC3102021.pdf">http://kucon.lib.ku.ac.th/FullText/KC3102021.pdf</a>	B
41	Supaporn Isriyodom, Nirat Gongruttananun and Ratana Chotesangasa	Growth and carcass composition of the native compared with those of some other pure-breed chickens.	Kasetsart University	Research	1993	<a href="http://kucon.lib.ku.ac.th/FullText/KC3102022.pdf">http://kucon.lib.ku.ac.th/FullText/KC3102022.pdf</a>	B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
42	Ratana Chotesangasa , Nirat Gongruttananun and Supaporn Isriyodom	Reproductive development and basal steroid hormone levels of the native compared with those of some other pure breed chickens.	Kasetsart University	Research	1993	<a href="http://kucon.lib.ku.ac.th/FullText/KC3102020.pdf">http://kucon.lib.ku.ac.th/FullText/KC3102020.pdf</a>	B
43	Chantana Kunjara and Arkom Sangvaraonod	Internal parasites of alimentary tracts of adult native chickens in the north-eastern part of Thailand.	Kasetsart University	Article	1993	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5409&amp;query=Native%20Chicken&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5409&amp;query=Native%20Chicken&amp;doc_type=0</a>	D
44	Arkom Sangvaraonod	Studies on prevalence and outbreak of ectoparasites in native chickens in central part of Thailand.	Kasetsart University	Article	1993	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5391&amp;query=%E0%B9%A0%E0%B8%9C&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5391&amp;query=%E0%B9%A0%E0%B8%9C&amp;doc_type=0</a>	D
45	Nopparat Tuntimakin	Effects of low protein diets on indigenous chicken production.	Burapha University	Thesis	1993	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=95&amp;option=show&amp;bib=4059&amp;query=%E0%B9%A0%E0%B8%9C&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=95&amp;option=show&amp;bib=4059&amp;query=%E0%B9%A0%E0%B8%9C&amp;doc_type=0</a>	F
46	Prachya Prachyalak, Noppawan Chomchai and Thalearnsak Nothanavongs	Effect of dietary protein and energy levels on performance of native - Sanghai chicken.	Department of Livestock Development	Research	1993	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2536/R3603.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2536/R3603.pdf</a>	F/B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
47	Ratana Chotesangasa, Nirat Gongruttananun and Supaporn Isriyodom	Basal steroid hormone profiles and reproductive organ development of the native and commercial laying hen in different states of egg production.	Kasetsart University	Article	1994	<a href="http://202.28.18.233/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5477&amp;query=1&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5477&amp;query=1&amp;doc_type=0</a>	B
48	Ratana Chotesangasa, Supaporn Isriyodom and Nirat Gongruttananun	Comparative studies on laying performance and egg components of the native and commercial laying hens.	Kasetsart University	Article	1994	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5457&amp;query=1&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5457&amp;query=1&amp;doc_type=0</a>	B
49	Punnee Amnueysit	Effect of the herbal mixture to get rid egg worms of native chickens.	Rajamangala University of Technology Lanna	Research	1994	<a href="http://kucon.lib.ku.ac.th/FullText/KC3202028.pdf">http://kucon.lib.ku.ac.th/FullText/KC3202028.pdf</a>	D
50	Chantana Kunjara and Arkom Sangvaraonod	Internal parasites of alimentary tracts of adult native chickens in the north-eastern part of Thailand. II. Study by faecal examination.	Kasetsart University	Article	1994	<a href="http://202.28.18.233/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5481&amp;query=1&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5481&amp;query=1&amp;doc_type=0</a>	D
51	Arkom Sangvaraonod	Parasitic helminthes of native chickens in the central part of Thailand.	Kasetsart University	Article	1994	<a href="http://202.28.18.233/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5500&amp;query=1&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5500&amp;query=1&amp;doc_type=0</a>	D

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
52	Uraivan Ninpetch, Kanchana Bunsit, Rugkiat Sanprasert and Shaliaw Boonman	Protein source from natural insect for native hen 1. Study on kinds and native values of insects.	Ubon Ratchanthani University	Research report	1994	<a href="http://202.28.18.233/dcms/basic.php?institute_code=100&amp;option=show&amp;bib=420&amp;query=ไก่&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=100&amp;option=show&amp;bib=420&amp;query=ไก่&amp;doc_type=0</a>	F
53	Rachun Buoban	Utilization of Water soaked leucaena leaves meals in crossbred Thai native chickens diets.	Nakhon Phanom Agricultural College	Research	1994	<a href="http://kucon.lib.ku.ac.th/FullText/KC3202005.pdf">http://kucon.lib.ku.ac.th/FullText/KC3202005.pdf</a>	F
54	Ratana Chotesangasa and Pinate Suntipong	Effect of lighting programmes on growth and laying performance of the native chicken.	Kasetsart University	Article	1994	<a href="http://202.28.18.233/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5499&amp;query=ไก่&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5499&amp;query=ไก่&amp;doc_type=0</a>	M
55	Tunyaporn Kiranuntavat	Effects of castration the crossbred native chickens at 10-14 weeks of age on performance.	Surindra Rajabhat University	Research report	1994	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=21&amp;option=show&amp;bib=280&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=21&amp;option=show&amp;bib=280&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	M
56	Voravit Siriphonvat	Identification of chicken B-Haplotype with Polyclonal Anti-serum.	Kasetsart University	Article	1995	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5562&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5562&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	B
57	Prachya Prachyalak and Noppawan Chomchai	Performance of native - Shianghi chicken under small farm conditions.	Department of Livestock Development	Research	1995	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2538/R3803.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2538/R3803.pdf</a>	B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
58	Punnee Amnueysit	Study on effective of <i>Curcuma longa</i> , <i>Stephania votunda</i> and <i>Areca catechu</i> to Control worm's egg of native chicks.	Rajamangala University of Technology Lanna	Research	1995	<a href="http://kucon.lib.ku.ac.th/FullText/KC3302054.pdf">http://kucon.lib.ku.ac.th/FullText/KC3302054.pdf</a>	D
59	Phongsri Somya	The life cycle of <i>Raillietina cesticillus</i> Molin, 1858 in domestic chick ( <i>Gallus gallus domesticus</i> ) in Chiang Mai province.	Chiang Mai University	Thesis	1995	<a href="http://202.28.18.233/dcims/basic.php?institute_code=57&amp;option=show&amp;bib=7669&amp;query=1&amp;doc_type=0">http://202.28.18.233/dcims/basic.php?institute_code=57&amp;option=show&amp;bib=7669&amp;query=1&amp;doc_type=0</a>	D
60	Punnee Amnueysit	Study of three methods of castration on native chicks on body weight.	Rajamangala University of Technology Lanna	Research	1995	<a href="http://kucon.lib.ku.ac.th/FullText/KC3302053.pdf">http://kucon.lib.ku.ac.th/FullText/KC3302053.pdf</a>	M
61	Udomsri Intarachote , Rachdawan Poonpipat and Kalaya Bunyanuwat	Growth and carcass quality of native crossbred chicken.	Department of Livestock Development	Research	1996	<a href="http://kucon.lib.ku.ac.th/FullText/KC3403019.pdf">http://kucon.lib.ku.ac.th/FullText/KC3403019.pdf</a>	B
62	Osoth Naksakul, Sumon Pojun and Somchit Intharamanee	Effect of dietary lysine levels on growth performance of cross-bred native chicken.	Department of Livestock Development	Research	1996	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2539/R3912.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2539/R3912.pdf</a>	F/B
63	Ratana Chotesangasa and Nirat Gongruttananun	Effect of ages at the onset of light restriction on growth and laying performance in the native chicken.	Kasetsart University	Article	1996	<a href="http://dcms.thailis.or.th/dcims/basic.php?institute_code=91&amp;option=show&amp;bib=5589&amp;query=Native%20Chicken&amp;doc_type=0">http://dcms.thailis.or.th/dcims/basic.php?institute_code=91&amp;option=show&amp;bib=5589&amp;query=Native%20Chicken&amp;doc_type=0</a>	M
64	Prachya Prachyalak, Noppawan Chomchai and Viroje Wanasitchaiwat	On farm research on intensive raising native - Shianghai chicken.	Department of Livestock Development	Research	1996	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2539/R3911.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2539/R3911.pdf</a>	M

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
65	Ratana Chotesangasa and Nirat Gongruttananun	Response to interruption with short photoperiod in mid-laying of the native hen.	Kasetsart University	Article	1996	<a href="http://202.28.18.233/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5633&amp;query=ไก่&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5633&amp;query=ไก่&amp;doc_type=0</a>	M
66	Phongphit Phunakrom	Technology needs on the native chicken production of farmers in the village level Amphoe Khok Charoen, Changwat Lop Buri.	Kasetsart University	Research	1996	<a href="http://kucon.lib.ku.ac.th/FullText/KC3410002.pdf">http://kucon.lib.ku.ac.th/FullText/KC3410002.pdf</a>	M
67	Nirat Gongruttananun and Ratana Chotesangasa	A study of growth and carcass yield of Bethong chickens compared with those of native and crossbred Betong x native chickens.	Kasetsart University	Article	1996	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5617&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5617&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	M/B
68	Aruneepong Srisathaporn, Terdsak Khammeng , Pitcharat Sanchaisuriya, Kanok Palaruk, Pitak Sripraya and Sompong Chaiput	A study on productive performance of native chicken.	Khon Kaen University	Research report	1997	<a href="http://202.28.18.233/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=10408&amp;query=ไก่&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=10408&amp;query=ไก่&amp;doc_type=0</a>	B
69	Suporn Katawatin, Adisak Sangkaew , Terdsak Khammeng and Sompong Chaiput	The biological studies on reproductive cycle, ovulation cycle, oviposition and related behaviours in the Thai Native Hens II. The roles of progesterone and its related to prolactin.	Khon Kaen University	Research report	1997	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=8390&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=8390&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
70	Chertchai Ratanasetthakul, Kanlaya Chuachan, Somyot Khorsakul, Suriya Kawongklang and Suravit Chobjit	Anthelmintic activity of Ebony ( <i>Diospyros mollis</i> , Griff) against endoparasites in native chickens.	Khon Kaen University	Research	1997	<a href="http://kucon.lib.ku.ac.th/FullText/KC3503005.pdf">http://kucon.lib.ku.ac.th/FullText/KC3503005.pdf</a>	D
71	Amnuay Leotaragul, Somkuan Punyavee and Santisuk Daungjun	Body weight, daily gain and mortality of native chickens from sires and dams with high and low-immunity response to Newcastle disease.	Department of Livestock Development	Research	1997	<a href="http://kucon.lib.ku.ac.th/FullText/KC3502047.pdf">http://kucon.lib.ku.ac.th/FullText/KC3502047.pdf</a>	D
72	Chertchai Ratanasetthakul, Prasert Wongnak, Sithichoke Egpuknak and Suraput Laohawanich	Effect of some medicinal plant extracts on mite and louse of native chickens.	Khon Kaen University	Research	1997	<a href="http://kucon.lib.ku.ac.th/FullText/KC3503004.pdf">http://kucon.lib.ku.ac.th/FullText/KC3503004.pdf</a>	D
73	Chantana Kunjara and Arkom Sangvaraonod	Internal parasites in the alimentary tracts of adult native chickens in the southern part of Thailand.	Kasetsart University	Article	1997	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5721&amp;query=Native%20Chicken&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5721&amp;query=Native%20Chicken&amp;doc_type=0</a>	D
74	Sawai Namkum, Jaruwat Chinsuwan and Amnuay Leotaragul	Prediction for body weight of native chickens at 16 and 20 weeks.	Department of Livestock Development	Research	1998	<a href="http://kucon.lib.ku.ac.th/FullText/KC3602037.pdf">http://kucon.lib.ku.ac.th/FullText/KC3602037.pdf</a>	B
75	Amnuay Leotaragul, Siripun Morathopand Santisuk Daungjun	Selection and improvement of native chickens to immunity development against Newcastle disease.	Department of Livestock Development	Research	1998	<a href="http://kucon.lib.ku.ac.th/FullText/KC3602034.pdf">http://kucon.lib.ku.ac.th/FullText/KC3602034.pdf</a>	B/D

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
76	Pirat Sornplang, Pichet Leungtongkum, Wasan Jantarasanit, Chaiyaporn Soikum and Varunee Lromna	A study of vaccination in native chicken in the village : A case study in Tumbol Donchang Ampur Maung Khon Kaen province.	Khon Kaen University	Research report	1998	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=8493&amp;query=Native%20Chicken&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=8493&amp;query=Native%20Chicken&amp;doc_type=0</a>	D
77	Noppawan Chomchai, Sawai Namkhun and Witthaya Sumamal	Effect of Dietary Protein and Energy Levels on Growth Performances of Crossbred Native Chicken	Department of Livestock Development	Research	1998	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2541/R4108.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2541/R4108.pdf</a>	F
78	Prachya Prachyalak, Noppawan Chomchai and Viroje Wanasitchaiwat	Effect of dietary protein and energy levels on performance of native - Shanghai breeder.	Department of Livestock Development	Research	1998	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2541/R4108.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2541/R4108.pdf</a>	F/B
79	Somchai Suwanapradit and Sarkda Glinsukon	Protein, lysine and methionine requirements of four crossbred chickens (Rhode Island Red x Barred Plymouth Rock x Sieng-hi x Native Chickens).	Rajamangala University of Technology Tawan-ok	Research report	1998	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=51&amp;option=show&amp;bib=43&amp;query=Native%20Chicken&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=51&amp;option=show&amp;bib=43&amp;query=Native%20Chicken&amp;doc_type=0</a>	F/B
80	Sawai Namkun, Siripun Morathop and Amnuay Leotaragul	Body weight and mortality of native chickens raised under the local condition.	Department of Livestock Development	Research	1998	<a href="http://kucon.lib.ku.ac.th/FullText/KC3602036.pdf">http://kucon.lib.ku.ac.th/FullText/KC3602036.pdf</a>	M

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
81	Cherdchai Ratanasetthakul, Banyat Laupaiboon, Pitcharat Sanchaisuriya, Suvat Jitpraneechai, Kanlaya Chuachan, Silthum Wara-Aswapati, Gitikorn Jenpaibool, Kitti Kubkaew and Sumran Wijitphan	Distribution of production technology for village chicken and crossbred.	Khon Kaen University	Research report	1998	<a href="http://202.28.18.233/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=8492&amp;query=1&amp;n&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=8492&amp;query=1&amp;n&amp;doc_type=0</a>	M
82	Pararin Phreechawattanakorn	Technology needs on native chicken raising of farmers at Hot district, Chiang Mai province.	Chiang Mai University	Thesis	1998	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=57&amp;option=show&amp;bib=197&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=57&amp;option=show&amp;bib=197&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	M
83	Noppawan Chomchai, Sumon Pojun and Viroj Wanasitchaiwat	Effect of dietary protein and housing system on growth performance and carcass characteristics of crossbred native chicken.	Department of Livestock Development	Research	1998	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2541/R4107.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2541/R4107.pdf</a>	M/B
84	Pitcharat Sanchaisuriya, Aruneepong Srisathaporn, Terdsak Khammeng, Monchai Duangjinda, Pitak Sripraya and Sompong Chaiput	A study on productive performance in F1 (First generation) of native chicken.	Khon Kaen University	Research report	1999	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=8612&amp;query=Native%20Chicken&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=8612&amp;query=Native%20Chicken&amp;doc_type=0</a>	B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
85	Pitcharat Sanchaisuriya, Aruneepong Srisathaporn, Terdsak Khammeng, Tawin Wongpalub, Pitak Sripraya and Sompong Chaiput	A study on reproductive performance of native chicken.	Khon Kaen University	Research report	1999	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=8614&amp;query=Native%20Chicken&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=8614&amp;query=Native%20Chicken&amp;doc_type=0</a>	B
86	Voravit Siriphonvat	Comparing the genetic parameter of body weight estimated with 2 methods in Thai indigenous chicken.	Kasetsart University	Article	1999	<a href="http://202.28.18.233/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5899&amp;query=ไก่&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5899&amp;query=ไก่&amp;doc_type=0</a>	B
87	Piyamas Karnsomdee	Genetic variations of Thai native fowls Gallus gallus domesticus based on microsatellite DNA.	Chulalongkorn University	Thesis	1999	<a href="http://202.28.18.233/dcms/basic.php?institute_code=90&amp;option=show&amp;bib=4211&amp;query=ไก่&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=90&amp;option=show&amp;bib=4211&amp;query=ไก่&amp;doc_type=0</a>	B
88	Adisak Sangkaew	Progesterone level in reproductive cycle of Thai native hens.	Khon Kaen University	Thesis	1999	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=5970&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=5970&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	B
89	Ratana Chotesangasa and Nirat Gongrattananun	Reproductive development and performance of male native chickens raised under natural day length and photoperiod of fifteen hours a day.	Kasetsart University	Article	1999	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5913&amp;query=Native%20Chicken&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5913&amp;query=Native%20Chicken&amp;doc_type=0</a>	B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
90	Chertchai Ratanasetthakul, Kanlaya Chuachan and Silthum Wara-Aswapati	A health study of native crossbred chickens.	Khon Kaen University	Research	1999	<a href="http://kucon.lib.ku.ac.th/FullText/KC3703005.pdf">http://kucon.lib.ku.ac.th/FullText/KC3703005.pdf</a>	D
91	Cherdchai Ratanasetthakul, Kanlaya Chuachan and Gitikorn Jenpaibool	Effect of deworming on the growth rate and immune response to Newcastle disease vaccine and Infectious Bursal disease vaccine in native crossbred chickens.	Khon Kaen University	Research	1999	<a href="http://kucon.lib.ku.ac.th/FullText/KC3703004.pdf">http://kucon.lib.ku.ac.th/FullText/KC3703004.pdf</a>	D/B
92	Paichok Panja	A Study on the appropriated level of protein on the performance of indigenous chicken during 0-6, 7-12 and 13-18 weeks.	Thammasat University	Research	1999	<a href="http://www.trf.or.th/research/abstract/Eng/PDF4080047E.txt">http://www.trf.or.th/research/abstract/Eng/PDF4080047E.txt</a>	F
93	Paichok Panja	A study on the appropriated level of protein on the performance of indigenous chicken in various period of ages.	Thammasat University	Article	1999	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5914&amp;query=%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5914&amp;query=%E0%B9%A0&amp;doc_type=0</a>	F
94	Paichok Panja	The effect of protein levels on native chickens performance during 0-6 weeks of age.	Thammasat University	Research	1999	<a href="http://kucon.lib.ku.ac.th/FullText/KC3702031.pdf">http://kucon.lib.ku.ac.th/FullText/KC3702031.pdf</a>	F

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
95	Ratana Chotesangasa and Nirat Gongrattananun	Effect of long photoperiod on growth, carcass yield, and carcass composition in native chickens were examined. Two lighting programmes of natural day length (NDL) and photoperiod of 23 hours/day (23L:1D).	Kasetsart University	Research report	1999	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5805&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=5805&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	M
96	Banyat Laupaiboon, Pitcharat Sanchaisuriya, Tawin Wongpalub and Aruneepong Srisathaporn	Study on integrated farming methods: III. Native crossbred chicken - catfish farming.	Khon Kaen University	Research report	1999	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=9005&amp;query=การศึกษาไก่พื้นเมืองผสมรวมกับการเลี้ยงปลาตก&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=9005&amp;query=การศึกษาไก่พื้นเมืองผสมรวมกับการเลี้ยงปลาตก&amp;doc_type=0</a>	M
97	Banyat Laupaiboon, Pitcharat Sanchaisuriya, Aruneepong Srisathaporn and Pitak Sripraya	Study on native chicken improvement in the North-east : I. productive performance.	Khon Kaen University	Research report	1999	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=8613&amp;query=Native%20Chicken&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=8613&amp;query=Native%20Chicken&amp;doc_type=0</a>	M
98	Banyat Laupaiboon and Suvat Jitpraneechai	Study on native chickens production in the villages of Amphur Muang, Changwat Khon Kaen.	Khon Kaen University	Research report	1999	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=8611&amp;query=Native%20Chicken&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=8611&amp;query=Native%20Chicken&amp;doc_type=0</a>	M

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
99	Thikhomporn PhonArmat	The success of native chicken raising a minor occupation in Sansai district, Chiang Mai province.	Chiang Mai University	Thesis	1999	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=57&amp;option=show&amp;bib=376&amp;query=%E0%B7%9C%E0%B7%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=57&amp;option=show&amp;bib=376&amp;query=%E0%B7%9C%E0%B7%A0&amp;doc_type=0</a>	M
100	Cherdchai Ratanasetthakul	Distribution of production technology for village chicken and crossbred.	Khon Kaen University	Research	1999	<a href="http://www.trf.or.th/research/abstract/Eng/RDG4020025E.txt">http://www.trf.or.th/research/abstract/Eng/RDG4020025E.txt</a>	M/B
101	Punrapee Amnueysit, Komsan Amnueysit and Sanit Toumsakul	Diversity of Thai cocks at Amphur Muang Pichit province 1) Breeds of cocks.	Rajamangala University of Technology Lanna	Research	2000	<a href="http://kucon.lib.ku.ac.th/FullText/KC3802033.pdf">http://kucon.lib.ku.ac.th/FullText/KC3802033.pdf</a>	B
102	Punrapee Amnueysit, Komsan Amnueysit, Sanit Toumsakul and Boontum Potikoung	Diversity of Thai cocks at Amphur Muang Pichit province 2) Luang group.	Rajamangala University of Technology Lanna	Research	2000	<a href="http://kucon.lib.ku.ac.th/FullText/KC3802034.pdf">http://kucon.lib.ku.ac.th/FullText/KC3802034.pdf</a>	B
103	Punrapee Amnueysit, Komsan Amnueysit, Sanit Toumsakul and Boontum Potikoung	Diversity of Thai cocks at Amphur Muang Pichit province 3) Praduee group.	Rajamangala University of Technology Lanna	Research	2000	<a href="http://kucon.lib.ku.ac.th/FullText/KC3802035.pdf">http://kucon.lib.ku.ac.th/FullText/KC3802035.pdf</a>	B
104	Punrapee Amnueysit, Komsan Amnueysit, Sanit Toumsakul and Virat Tongyim	Diversity of Thai Cocks at Amphur Muang Pichit Province 4) She, Seesa, Dhogmak, Siamdum and Keaw Group	Rajamangala University of Technology Lanna	Research	2000	<a href="http://kucon.lib.ku.ac.th/FullText/KC3802036.pdf">http://kucon.lib.ku.ac.th/FullText/KC3802036.pdf</a>	B
105	Punrapee Amnueysit, Komsan Amnueysit, Sanit Toumsakul and Virat Tongyim	Diversity of Thai cocks at Amphur Muang Pichit province 5) Tao Group, Dang Group and Dhang Group.	Rajamangala University of Technology Lanna	Research	2000	<a href="http://kucon.lib.ku.ac.th/FullText/KC3802037.pdf">http://kucon.lib.ku.ac.th/FullText/KC3802037.pdf</a>	B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
106	Adisak Sangkaew, Suport Katawatin and Weerasak Wongsrikeao	Progesterone pattern in reproductive cycle of Thai native hens ( <i>Gallus domesticus</i> ).	Khon Kaen University	Research	2000	<a href="http://kucon.lib.ku.ac.th/FullText/KC3802022.pdf">http://kucon.lib.ku.ac.th/FullText/KC3802022.pdf</a>	B
107	Suwannee Nithiuthai and Sudchit Chungpivat	First report of intestinal flukes <i>Notocotylus</i> and <i>Prosthogonimus</i> in native chicken in Thailand.	Chulalongkorn University	Research	2000	<a href="http://kucon.lib.ku.ac.th/FullText/KC3803055.pdf">http://kucon.lib.ku.ac.th/FullText/KC3803055.pdf</a>	D
108	Punrapee Amnueysit, Somkit Anawatchakul and Tinakorn Thatrakul	Uses of <i>Casmania grewifolis</i> Vent., and <i>Stenoma tuberosa</i> Lour. to control external parasites of native chicken and cattle.	Rajamangala University of Technology Lanna Phitsanulok Campus	Research report	2000	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=44&amp;option=show&amp;bib=165&amp;query=%E0%B9%A0%E0%B8%9C&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=44&amp;option=show&amp;bib=165&amp;query=%E0%B9%A0%E0%B8%9C&amp;doc_type=0</a>	F
109	Suchon Tangtaweewipat, Boonlom Cheva-Isarakul and Roongrat Pingmuang	Proper dietary protein and energy levels for growing crossbred native chickens(I).	Chiang Mai University	Research	2000	<a href="http://kucon.lib.ku.ac.th/FullText/KC3802014.pdf">http://kucon.lib.ku.ac.th/FullText/KC3802014.pdf</a>	F/B
110	Watcharapong Funtip	A follow-up of an extensive supplementary project related to self employment : A case study of native chicken farming Ban Doi Dan, Lamphun.	Chiang Mai University	Thesis	2000	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=57&amp;option=show&amp;bib=6572&amp;query=%E0%B9%A0%E0%B8%9C&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=57&amp;option=show&amp;bib=6572&amp;query=%E0%B9%A0%E0%B8%9C&amp;doc_type=0</a>	M
111	Prapatsorn Vudhipanee	The essential technology on the indigenous chicken raising development of farmers : A case study of Phra Nakhon Si Ayutthaya province.	Kasetsart University	Thesis	2000	<a href="http://202.28.18.233/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=8017&amp;query=%E0%B9%A0&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=8017&amp;query=%E0%B9%A0&amp;doc_type=0</a>	M

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
112	Mitre Kasibut	Factors affecting the production efficiency of raising Thai native cross-bred chicken of the farmers in the poultry dissemination project, Changwat Lop Buri.	Kasetsart University	Thesis	2000	<a href="http://202.28.18.233/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=8544&amp;query=1&amp;n&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=8544&amp;query=1&amp;n&amp;doc_type=0</a>	M/B
113	Jutarut Jantaboon	Study of endogenous retrovirus (ev-21) DNA band in chicken.	Kasetsart University	Thesis	2001	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=1334&amp;query=1&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=1334&amp;query=1&amp;doc_type=0</a>	D
114	Watee Kongbuntad and Rotjana Pranudso	The effects of different doses of Pueraria mirifica on the performance of native chickens.	Maharakham University	Research	2001	<a href="http://kucon.lib.ku.ac.th/FullText/KC3902035.pdf">http://kucon.lib.ku.ac.th/FullText/KC3902035.pdf</a>	D
115	Manahnun(Piyanoot) Prasittirat, Udomsri Intarachote, Suwanee Nithiuthai, Sontana Mimapan , Anucha Sookruen and Kingdao Mohkaew	Treatment of Avian malaria and Leucocytozoonosis co infection in native chickens by medication and mosquito nets.	Department of Livestock Development	Research	2001	<a href="http://kucon.lib.ku.ac.th/FullText/KC3903016.pdf">http://kucon.lib.ku.ac.th/FullText/KC3903016.pdf</a>	D
116	Manahnun (Piyanoot) Prasittirat, Montakan Vongpakorn, Tasanee Chompoochan, Udomsri Intarachote, Kingdao Moekaew and Anucha Sookruen	Treatment of Leucocytozoonosis in native chickens by sulfadimethoxine and mosquito nets.	Department of Livestock Development	Research	2001	<a href="http://kucon.lib.ku.ac.th/FullText/KC3903015.pdf">http://kucon.lib.ku.ac.th/FullText/KC3903015.pdf</a>	D

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
117	Watee Kongbuntad and Chandee Nonsila	The effects of dried powder Pueraria mirifica on performance of native chickens.	Maharakham University	Research	2001	<a href="http://kucon.lib.ku.ac.th/FullText/KC3902034.pdf">http://kucon.lib.ku.ac.th/FullText/KC3902034.pdf</a>	F
118	Sumon Pojun, Prasert Pojun and Viroj Wonasitchaiwat	Effect of ration and fattening period on carcass characteristics and production costs of crossbred native chicken.	Department of Livestock Development	Research	2001	<a href="http://www.dld.go.th/nutrition/exhibition/RES_EARCH/research_full/2544/R4416.doc">http://www.dld.go.th/nutrition/exhibition/RES_EARCH/research_full/2544/R4416.doc</a>	F/B
119	Roongrat Pingmuang	Proper dietary protein and energy levels for three crossbred chickens in summer and cool seasons.	Chiang Mai University	Thesis	2001	<a href="http://202.28.18.233/dcms/basic.php?institute_code=57&amp;option=show&amp;bib=543&amp;query=ไก่&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=57&amp;option=show&amp;bib=543&amp;query=ไก่&amp;doc_type=0</a>	F/B
120	Chamaiporn Thummachot	A study on native crossbred chickens production of farmers under the subsistence agricultural project in Khon Kaen province.	Khon Kaen University	Thesis	2001	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=3065&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=3065&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	M
121	Prapa Laosomboon	Agriculturist's situation and technology for raising native chicken in Amphur Chombung, Ratchaburi province.	Muban Chombueng Rajabhat University	Thesis	2001	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=10&amp;option=show&amp;bib=51&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=10&amp;option=show&amp;bib=51&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	M

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
122	Panom Meesiriparn	Farmer's potential on native chicken production, Uttaradit province.	Chiang Mai University	Thesis	2001	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=57&amp;option=show&amp;bib=423&amp;query=%E0%B7%9C%E0%B7%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=57&amp;option=show&amp;bib=423&amp;query=%E0%B7%9C%E0%B7%A0&amp;doc_type=0</a>	M
123	Narathus Prathummes	The cross-bred native chicken business of farmer in Phayao province.	Chiang Mai University	Thesis	2001	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=57&amp;option=show&amp;bib=292&amp;query=%E0%B7%9C%E0%B7%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=57&amp;option=show&amp;bib=292&amp;query=%E0%B7%9C%E0%B7%A0&amp;doc_type=0</a>	M/B
124	S. Jaturasitha, V. Leangwunta, A. Leotaragul, A. Phongphaew, T. Apichartsrunkoon, N. Simasathitkul, T. Vearasilp, L. Worachai, U. ter Meulen	A Comparative Study of Thai Native Chicken and Broiler on Productive Performance, Carcass and Meat Quality	Chiang Mai University	Research report	2002	<a href="http://www.tropentag.de/2002/abstracts/full/213.pdf">http://www.tropentag.de/2002/abstracts/full/213.pdf</a>	B
125	Buncha Pongpisantham	A study on native chicken genetic diversities in northern Thailand.	Maejo University	Research report	2002	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=58&amp;option=show&amp;bib=382&amp;query=%E0%B7%9C%E0%B7%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=58&amp;option=show&amp;bib=382&amp;query=%E0%B7%9C%E0%B7%A0&amp;doc_type=0</a>	B
126	Chalerm Mahachon	Fighting cock breeds and cock fighting in Nakhon Pathom province.	Nakhonpathom Rajabhat University	Thesis	2002	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=3&amp;option=show&amp;bib=60&amp;query=%E0%B7%9C%E0%B7%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=3&amp;option=show&amp;bib=60&amp;query=%E0%B7%9C%E0%B7%A0&amp;doc_type=0</a>	B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
127	Pin Chanjula, Kriengsak Pattamarakha, Worawit Wanichapichart, Thumrong Thongchumroon, Somku an Torngprang and Somsak Laochareonsuk	Village Betong chicken production the three southern of Thailand.	Prince of Songkla University, Pattani Campus	Research report	2002	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=98&amp;option=show&amp;bib=1494&amp;query=%E0%B9%9C%E0%B9%A0&amp;doc_type=Q">http://dcms.thailis.or.th/dcms/basic.php?institute_code=98&amp;option=show&amp;bib=1494&amp;query=%E0%B9%9C%E0%B9%A0&amp;doc_type=Q</a>	B/M
128	Noppawan Chomchai, Witthaya Sumamal, Sawai Namkhun and Watcharin Boonpukdee	Feed and feeding study for crossbred native chicken 3) Effect of dietary protein levels on growth performances and Carcass characteristics of four – crossbred native chicken VS five – crossbred native chicken.	Department of Livestock Development	Research	2002	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2545/R4517.doc">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2545/R4517.doc</a>	F/B
129	Boonyawadee Tananchai	Proper rations for crossbred native chickens during growing period.	Chiang Mai University	Thesis	2002	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=57&amp;option=show&amp;bib=528&amp;query=%E0%B9%9C%E0%B9%A0&amp;doc_type=Q">http://dcms.thailis.or.th/dcms/basic.php?institute_code=57&amp;option=show&amp;bib=528&amp;query=%E0%B9%9C%E0%B9%A0&amp;doc_type=Q</a>	F/B
130	Suchon Tangtaweewipat	The recommendation of dietary protein and energy levels for growing crossbred native chickens.	Chiang Mai University	Research	2002	<a href="http://www.trf.or.th/research/abstract/Eng/RDG4220010E.txt">http://www.trf.or.th/research/abstract/Eng/RDG4220010E.txt</a>	F/B
131	Noppawan Chomchai, Thipa Punyavirocha and Anukit Khuamangkorn	Use of simple rations in crossbred native chicken.	Department of Livestock Development	Research	2002	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2545/R4518.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2545/R4518.pdf</a>	F/B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
132	Prachya Prachyalak, Pensri Sornprasitti, Arnuphab Sengsai and Sumon Pojun	Use of Tapra stylo leafmeal in crossbred native chicken diets.	Department of Livestock Development	Research	2002	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2545/R4516.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2545/R4516.pdf</a>	F/B
133	Onanong Leotaragul, Verapong Polsayom and Amnuay Leotaragul	Prelaying growth performance and mortality of native chickens raised by farmers in villages of Lampang province.	Department of Livestock Development	Research	2002	<a href="http://www.agri.cmu.ac.th/journal/pdf/J00050_C00226.pdf">http://www.agri.cmu.ac.th/journal/pdf/J00050_C00226.pdf</a>	M
134	Bundit Kiratikrankul	Active immunization against somatostatin hormone on growth and body fat quantity in native chicken and white rat.	Chiang Mai University	Thesis	2002	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=57&amp;option=show&amp;bib=527&amp;query=%E0%B9%A0%E0%B8%9C&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=57&amp;option=show&amp;bib=527&amp;query=%E0%B9%A0%E0%B8%9C&amp;doc_type=0</a>	M/B
135	Bundist Kiratikrankul , Petai Pongpiachan and Puntipa Pongpiachan	Effect of active immunization against somatostatin hormone on growth and body fat quantity in native chickens.	Chiang Mai University	Research	2002	<a href="http://www.agri.cmu.ac.th/journal/pdf/J00051_C00237.pdf">http://www.agri.cmu.ac.th/journal/pdf/J00051_C00237.pdf</a>	M/B
136	Visan Od-ton	Productivity performance of parent stocks and effects of dietary protein levels on growth performance of indigenous and crossbred chickens in southern Thailand.	Prince of Songkla University	Thesis	2002	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=98&amp;option=show&amp;bib=733&amp;query=%E0%B9%A0%E0%B8%9C&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=98&amp;option=show&amp;bib=733&amp;query=%E0%B9%A0%E0%B8%9C&amp;doc_type=0</a>	M/B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
137	Kharuthai Juntipbadee	Characteristics of down feathers, shank and beak colour in the crossbred chick from Thai native cock.	Kasetsart University	Thesis	2003	<a href="http://202.28.18.233/dcims/basic.php?institute_code=91&amp;option=show&amp;bib=1978&amp;query=1&amp;n&amp;doc_type=0">http://202.28.18.233/dcims/basic.php?institute_code=91&amp;option=show&amp;bib=1978&amp;query=1&amp;n&amp;doc_type=0</a>	B
138	Songyot Kittichonthawat, Chaiyapoom Bunchasak, Samret PaiBoon and Amornrat Promboon	Comparison of growth performance and carcass quality on Thai native Japanese Shamo and Crossbred ( Thai native x Japanese Shamo ) chicks.	Kasetsart University	Research	2003	<a href="http://kucon.lib.ku.ac.th/FullText/KC4102008.pdf">http://kucon.lib.ku.ac.th/FullText/KC4102008.pdf</a>	B
139	Chatchawan Singhapol	Genetic characterization by microsatellite polymorphosm in Thai native chicken compare with broiler and layer fowls.	Suranaree University of Technology	Thesis	2003	<a href="http://dcms.thailis.or.th/dcims/basic.php?institute_code=60&amp;option=show&amp;bib=136&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://dcms.thailis.or.th/dcims/basic.php?institute_code=60&amp;option=show&amp;bib=136&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	B
140	Chalermchai Hornta	Identification of native chickens in the northeast by using microsatellite marker.	Suranaree University of Technology	Thesis	2003	<a href="http://dcms.thailis.or.th/dcims/basic.php?institute_code=60&amp;option=show&amp;bib=107&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://dcms.thailis.or.th/dcims/basic.php?institute_code=60&amp;option=show&amp;bib=107&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
141	Udomsri Intarachote	Selection and improvement regional native chickens (Fahluang chickens) for raising in northern highland of Thailand. 1. Productive performance and genetic parameters of Fahluang chickens at generation 1.	Department of Livestock Development	Research report	2003	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=3521&amp;query=%E0%B9%9C%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=3521&amp;query=%E0%B9%9C%E0%B9%A0&amp;doc_type=0</a>	B
142	Banchorn Likitdecharote	Survey of gross appearance for Thai indigenous chicken (fighting cock) selection.	Suranaree University of Technology	Research report	2003	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=60&amp;option=show&amp;bib=303&amp;query=%E0%B9%9C%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=60&amp;option=show&amp;bib=303&amp;query=%E0%B9%9C%E0%B9%A0&amp;doc_type=0</a>	B
143	Varaporn leangwunta, Sanchai jaturasitha, Amnuay Leotaragul, Angkana Phongphaew and Chainarong Kantapanit	The meat and fat quality of native chickens and their crosses.	Chiang Mai University	Research	2003	<a href="http://kucon.lib.ku.ac.th/FullText/KC4102007.pdf">http://kucon.lib.ku.ac.th/FullText/KC4102007.pdf</a>	B
144	Varaporn Leangwanta	Influence of indigenous chicken and their crosses on productive and meat quality.	Chiang Mai University	Thesis	2003	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=57&amp;option=show&amp;bib=566&amp;query=%E0%B9%9C%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=57&amp;option=show&amp;bib=566&amp;query=%E0%B9%9C%E0%B9%A0&amp;doc_type=0</a>	B/M
145	Somjet Tongnual	A study of amino acid proportion and the effect of lysine supplementation in low protein diet in Thai native chicks.	Kasetsart University	Thesis	2003	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=1985&amp;query=%E0%B9%9C%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=1985&amp;query=%E0%B9%9C%E0%B9%A0&amp;doc_type=0</a>	F

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
146	Somjet Tongnual, Chaiyapoom Bunchasak, Samret Paibool and Amornrat Promboon	Effect of lysine supplementation in low- protein diet on growth performance of Thai native chicks.	Kasetsart University	Research	2003	<a href="http://kucon.lib.ku.ac.th/FullText/KC4102025.pdf">http://kucon.lib.ku.ac.th/FullText/KC4102025.pdf</a>	F
147	Bussayarat Maikhunthod	Extraction and antioxidant activity of carnosine from native, hybrid native and broiler chicken meats.	Suranaree University of Technology	Thesis	2003	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=60&amp;option=show&amp;bib=146&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=Q">http://dcms.thailis.or.th/dcms/basic.php?institute_code=60&amp;option=show&amp;bib=146&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=Q</a>	F/B
148	Chuchavan Phumsiadorn	Adoption of native chicken production technology of farmers in fowl production and extension project in Changwat Kalasin.	Khon Kaen University	Thesis	2003	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=1394&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=Q">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=1394&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=Q</a>	M
149	Theerachai Haitook, Ezzat Tawfik and Michael Zöbisch	Options for Native Chicken ( <i>Gallus domesticus</i> ) Production in North-eastern Thailand	Asian Institute of Technology, School of Environment	Research report	2003	<a href="http://www.tropentag.de/2003/abstracts/full/166.pdf">http://www.tropentag.de/2003/abstracts/full/166.pdf</a>	M
150	Sanchai Jaturasitha, Ratchaneewan Khiaosa- ard, Ankana Phongphaew, Amnuay Leotaragul, Suparuag Saitong, Tusanee Apichatsrungkoon and Varaporn Leangwunta	Carcass and indirect meat quality of Thai Native and Gai Baan Thai chickens in different sex and weight.	Chiang Mai University	Research	2004	<a href="http://kucon.lib.ku.ac.th/FullText/KC4202018.pdf">http://kucon.lib.ku.ac.th/FullText/KC4202018.pdf</a>	B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
151	Kanok-Orn Intarapichate	A comparative study of characteristics, chemical composition and sensory qualities of hybrid native chicken, commercial broilers and laying male chicks.	Suranaree University of Technology	Research	2004	<a href="http://www.trf.or.th/research/abstract/Eng/RDG4520024E.txt">http://www.trf.or.th/research/abstract/Eng/RDG4520024E.txt</a>	B
152	Tassanee Triratapiwan	A study on genetic diversity of some Thai indigenous chicken lines by microsatellites.	King Mongkut's Institute of Technology Ladkrabang	Thesis	2004	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=101&amp;option=show&amp;bib=1302&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=101&amp;option=show&amp;bib=1302&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	B
153	S. Wattanachant, S. Benjakul and D. A. Ledward	Composition, Colour, and Texture of Thai Indigenous and Broiler Chicken Muscles	Prince of Songkla University	Research report	2004	<a href="http://ps.fass.org/cgi/eprint/83/1/123.pdf">http://ps.fass.org/cgi/eprint/83/1/123.pdf</a>	B
154	Ratchaneewan Khiaosard, Sanchai Jaturasitha, Angkana Phongphaew, Nakarin Pripwai, Varaporn Leangwunta, Amnuay Leotaragul, Suparuag Saitong, and Tusanee Apichatsrungkoon1	Meat quality of Thai native and Gai Baan Thai chicken as influenced by sex, weight and muscle.	Chiang Mai University	Research	2004	<a href="http://kucon.lib.ku.ac.th/FullText/KC4202016.pdf">http://kucon.lib.ku.ac.th/FullText/KC4202016.pdf</a>	B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
155	Sanchai Jaturasitha, Ratchaneewan Khiaosard, Angkana Phongphaew, Amnuay Leotaragul, Suparuag Saitong, Tusanee Apichatsrungkoon, Varaporn Leangwunta, and Nutdhapat Longani	The effect of strain, sex, weight and muscle on fat quality of Thai Native and crossbred chickens (Gai Baan Thai).	Chiang Mai University	Research	2004	<a href="http://kucon.lib.ku.ac.th/FullText/KC4202017.pdf">http://kucon.lib.ku.ac.th/FullText/KC4202017.pdf</a>	B
156	Pin Chanjula, Worawit Wanichapichart, Thumronh Thongchumroon and Somsak Laochareonsuk	Village Betong chicken production in three southernmost Thailand : A study of phenotypic characteristics, growth, carcass yield and egg performance of Betong chickens.	Prince of Songkla University, Pattani Campus	Research	2004	<a href="http://www.agri.cmu.ac.th/journal/pdf/J00056_C00308.pdf">http://www.agri.cmu.ac.th/journal/pdf/J00056_C00308.pdf</a>	B
157	Tawin Wongpalub, Banyat Laupaiboon, Pitcharat Sanchaisuriya, Sajee Kunhareang, Sarawut Sringam and Yupin Phasuk	Effect of extenders and cryoprotection on stored semen quality of native cock.	Khon Kaen University	Research	2004	<a href="http://202.28.18.233/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=10805&amp;query=iri&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=10805&amp;query=iri&amp;doc_type=0</a>	B/M
158	Tawin Wongpalub, Banyat Laupaiboon, Yupin Phasuk, Sajee Kunhareang, Pitcharat Sanchaisuriya and Sarawut Sringam	Factors affecting post-thawed quality of frozen semen in native chicken.	Khon Kaen University	Research	2004	<a href="http://202.28.18.233/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=10805&amp;query=iri&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=10805&amp;query=iri&amp;doc_type=0</a>	B/M

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
159	Tawin Wongpalub, Banyat Laupaiboon, Pitcharat Sanchaisuriya, Sajee Kunhareang and Yupin Phasuk	Study on fertility of native cock semen after artificial insemination.	Khon Kaen University	Research	2004	<a href="http://202.28.18.233/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=10805&amp;query=ไก่&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=10805&amp;query=ไก่&amp;doc_type=0</a>	B/M
160	Bongkot Noppon, Kwankate Kanistanon, Wasan Jantarasanit and Pitak Noimay	Proportional uses of zingiber purpureum rosc. in native crossbred chicken productions.	Khon Kaen University	Research report	2004	<a href="http://202.28.18.233/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=10807&amp;query=ไก่&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=10807&amp;query=ไก่&amp;doc_type=0</a>	D/B
161	Cholavity Gisavaspaisal	The study of feedstuffs for growing tails of the native chicken.	Ubon Ratchanthani Rajabhat University	Research report	2004	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=12&amp;option=show&amp;bib=342&amp;query=ไก่พื้นเมือง&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=12&amp;option=show&amp;bib=342&amp;query=ไก่พื้นเมือง&amp;doc_type=0</a>	F
162	Witthaya Sumamal, Somsak Poathong and Thawat Chitbanthoa	Feasibility of using tomato pomace as animal feed ( 7) Effects of various levels of dry tomato pomace in rations on performance of growing crossbred native chicken pomace in ration.	Department of Livestock Development	Research	2004	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2547/R4714.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2547/R4714.pdf</a>	F/B
163	Osoth Naksakul, Sadudee Pongpeajan and Supachai Udchachon	The metabolizable energy value of some local forage crop in cross-bred native chicken.	Department of Livestock Development	Research	2004	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2547/R4717.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2547/R4717.pdf</a>	F/B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
164	Natthawut Purintrapiban, Seksan Suankool, Chinda Snitwong and Chaleao Srichoo	Use of palm kernel cake as protein sources for crossbred native chicks.	Department of Livestock Development	Research	2004	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2547/R4724.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2547/R4724.pdf</a>	F/B
165	Thunwa Wiyabot	Utilization of cassava as energy source in Thai native crossbreed, broiler and laying rations.	Khon Kaen University	Thesis	2004	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=2230&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=2230&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0</a>	F/B
166	Chaiyawan Wattanachant	Carcass and meat qualities, physical properties, texture characteristics of meat from naked neck chicken and common Thai indigenous chicken.	Prince of Songkla University	Research	2005	<a href="http://www.trf.or.th/research/abstract/Eng/RDG4520022E.txt">http://www.trf.or.th/research/abstract/Eng/RDG4520022E.txt</a>	B
167	Somporn Duanyai	Cryopreservation of Thai native rooster semen.	Ubon Ratchanthani Rajabhat University	Research report	2005	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=12&amp;option=show&amp;bib=768&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=12&amp;option=show&amp;bib=768&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0</a>	B
168	Supansa Penmas	Estimation of growth curve and genetic parameters for growth traits in Thai Native Chicken (Praduhangdum breed).	Chulalongkorn University	Thesis	2005	<a href="http://202.28.18.233/dcms/basic.php?institute_code=90&amp;option=show&amp;bib=4553&amp;query=%E0%B9%A0&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=90&amp;option=show&amp;bib=4553&amp;query=%E0%B9%A0&amp;doc_type=0</a>	B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
169	Supamit Mekchay, Amnuay Leotaragul Anchali Wongsana and Patcharin Krutmuang	Molecular Marker-based Genetic Diversity Assessment of Thai Native Chicken and Broiler Chicken	Chiang Mai University	Research report	2005	<a href="http://www.tropentag.de/2005/abstracts/full/386.pdf">http://www.tropentag.de/2005/abstracts/full/386.pdf</a>	B
170	Patarapong Kreoksakul	Fighting cock raising system : Case study of Wa and Rawphonhong villages, Banwa sub- district, Maung district, Khon Kaen province.	Khon Kaen University	Thesis	2005	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=3844&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=3844&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0</a>	B/M
171	Udom Chuachan, Buddhachard Srisopa, Yingsan Suraseang, Parinya Pannurit, Usa Narksakul, Chartchai Kaewruang and Niyomsak Upathum	Study of avian influenza subtype H5 in native chicken : Clinical signs and gross lesions.	Department of Livestock Development	Research	2005	<a href="http://www.dld.go.th/niah/Research/2548/39.pdf">http://www.dld.go.th/niah/Research/2548/39.pdf</a>	D
172	Onanong Leotaragul	Increasing number of clutches in native hens and decreasing mortality of native chicks.	Department of Livestock Development	Research	2005	<a href="http://www.trf.or.th/research/abstract/Eng/RDG4620013E.txt">http://www.trf.or.th/research/abstract/Eng/RDG4620013E.txt</a>	M
173	Attachai Jintrawet	Native chicken simulation model development and testing.	Chiang Mai University	Research	2005	<a href="http://www.trf.or.th/research/abstract/Eng/RDA4630002E.txt">http://www.trf.or.th/research/abstract/Eng/RDA4630002E.txt</a>	M
174	S. Sangdaoreung, S. Tangtaweewipat, B. Cheva-Isarakul, B. Siririsawas, S. Punyawee and P. Na ChiangMai	Production improvement of native chickens : 2. Using incubator and fed with or without laying feed.	Chiang Mai University	Research report	2005	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=4282&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=4282&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0</a>	M

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
175	Suchon Tangtaweewipat	The product improvement of native chickens : Commercial production system.	Chiang Mai University	Research	2005	<a href="http://www.trf.or.th/research/abstract/Eng/RDG4620014E.txt">http://www.trf.or.th/research/abstract/Eng/RDG4620014E.txt</a>	M
176	S. Tangtaweewipat, S. Sangdaoreung, B. Cheva-Isarakul, B. Sirisrisawas and K. Punyachatrak	The production improvement of native chickens 1. Comparison of two feeding systems in two areas.	Chiang Mai University	Research	2005	<a href="http://kucon.lib.ku.ac.th/FullText/KC4302037.pdf">http://kucon.lib.ku.ac.th/FullText/KC4302037.pdf</a>	M
177	Panuwat Wonnakasam	The business management farm of Commercial native cross-bred chicken product : Case study in Roi-et province.	Khon Kaen University	Thesis	2005	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=3818&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=92&amp;option=show&amp;bib=3818&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0</a>	M/B
178		Thailand Poultry and Products Semi-Annual Overview - February 2006		Article	2005	<a href="http://www.thepoultryste.com/articles/512/thailand-poultry-and-products-semiannual-overview-february-2006">http://www.thepoultryste.com/articles/512/thailand-poultry-and-products-semiannual-overview-february-2006</a>	M
179	Jarae kri krom and Daru ee ara gsri	3. Formation of foundation stock of Thai Indigenous Daeng chicken : 3.5 Heritability estimates for body measurements in Dang chicken in generation 1-3.	Department of Livestock Development	Research	2006	<a href="http://www.dld.go.th/breeding/r/49/010_hen_1-3.pdf">http://www.dld.go.th/breeding/r/49/010_hen_1-3.pdf</a>	B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
180	Praprut jongjaipak, Darunee narungsri and Tawesilp jendoung	3. Formation of foundation stock of Thai indigenous Daeng chicken : 3.2 Phenotypic and genotypic correlation of body weight trait in Daeng chicken in generation 3 .	Department of Livestock Development	Research	2006	<a href="http://www.dld.go.th/breeding/r/49/07_weight_hen_na.pdf">http://www.dld.go.th/breeding/r/49/07_weight_hen_na.pdf</a>	B
181	Praprut jongjaipak, Jarae krinkrom and Tawesilp jeendoung	3. Formation of foundation stock of Thai Indigenous Daeng chicken : 3.4 A study of heritability and breeding value of economic traits in Daeng chicken at generation 3 .	Department of Livestock Development	Research	2006	<a href="http://www.dld.go.th/breeding/r/49/09_hen_ebv.pdf">http://www.dld.go.th/breeding/r/49/09_hen_ebv.pdf</a>	B
182	Darunee narungsri, Praprut jongjaipak and Tawesilp jeendoung	3. Formation of Foundation Stock of Thai Indigenous Daeng chicken 3.3 Phenotypic and Genetic correlations of egg production in Daeng chicken generation 3	Department of Livestock Development	Research	2006	<a href="http://www.dld.go.th/breeding/r/49/08_egg_hen2.pdf">http://www.dld.go.th/breeding/r/49/08_egg_hen2.pdf</a>	B
183	Neungrutai Promwatee	Antibody response against Newcastle disease vaccine in Thai indigenous chicken : Chee.	Ubon Ratchanthani University	Thesis	2006	<a href="http://202.28.18.233/dcms/basic.php?institute_code=100&amp;option=show&amp;bib=491&amp;query=%E0&amp;doc_type=0">http://202.28.18.233/dcms/basic.php?institute_code=100&amp;option=show&amp;bib=491&amp;query=%E0&amp;doc_type=0</a>	B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
184	Pin Chanjula	Betong chicken : the interesting native chicken.	Thaksin University	Article	2006	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=56&amp;option=show&amp;bib=1096&amp;query=%E0%B9%A0%E0%B9%A1%E0%B9%A2&amp;doc_type=Q">http://dcms.thailis.or.th/dcms/basic.php?institute_code=56&amp;option=show&amp;bib=1096&amp;query=%E0%B9%A0%E0%B9%A1%E0%B9%A2&amp;doc_type=Q</a>	B
185	Chanporn Chaosap and Kunya Tuntivisoottikul	Carcass quality and some muscle properties of broiler, native, Srithong and Tanawsri chicken.	King Mongkut's Institute of Technology Ladkrabang	Research	2006	<a href="http://kucon.lib.ku.ac.th/FullText/KC4402029.pdf">http://kucon.lib.ku.ac.th/FullText/KC4402029.pdf</a>	B
186	Chanporn Chaosap and Kunya Tuntivisoottikul	Carcass quality, colour and chemical composition of Burmese native, broiler and Thai native chicken meat.	King Mongkut's Institute of Technology Ladkrabang	Research	2006	<a href="http://kucon.lib.ku.ac.th/FullText/KC4402047.pdf">http://kucon.lib.ku.ac.th/FullText/KC4402047.pdf</a>	B
187	Tawee Oboun, Sawai Namkhun and Amnuay Leotaragul	Formation of foundation stock of Thai indigenous chicken (Pradu Hangdum) 7. Performance test in local condition of the chicken.	Department of Livestock Development	Research	2006	<a href="http://kucon.lib.ku.ac.th/FullText/KC4402049.pdf">http://kucon.lib.ku.ac.th/FullText/KC4402049.pdf</a>	B
188	Tawee Oboun, Sawai Namkhun and Amnuay Leotaragul	Foundation stock in Thai indigenous chicken Pradu Hangdum 5. Genetic parameters of body weight of chicken in various ages.	Department of Livestock Development	Research	2006	<a href="http://kucon.lib.ku.ac.th/FullText/KC4402044.pdf">http://kucon.lib.ku.ac.th/FullText/KC4402044.pdf</a>	B
189	Supamit Mekchay, Petai Pongpaichan, Amnuay Leotaragul and Patcharin Krutmuang	Identification of Differentially Expressed Genes in Thai Native and Broiler Chicken Muscles.	Chiang Mai University	Research report	2006	<a href="http://www.agr.niigata-u.ac.jp/study_report/report/58-02/147-150.pdf">http://www.agr.niigata-u.ac.jp/study_report/report/58-02/147-150.pdf</a>	B

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
190	Chanporn Chaosap and Kunya Tuntivisoottikul	Meat quality of broiler, native, Srithong, and Tanawsri chicken.	King Mongkut's Institute of Technology Ladkrabang	Research	2006	<a href="http://kucon.lib.ku.ac.th/FullText/KC4402028.pdf">http://kucon.lib.ku.ac.th/FullText/KC4402028.pdf</a>	B
191	Chanporn Chaosap and Kunya Tuntivisoottikul	The study of meat quality of Burmese native, broiler and Thai native chicken.	King Mongkut's Institute of Technology Ladkrabang	Research	2006	<a href="http://kucon.lib.ku.ac.th/FullText/KC4402046.pdf">http://kucon.lib.ku.ac.th/FullText/KC4402046.pdf</a>	B
192	Sontorn Sunathai, Theerachai Chormai and Pisai Wongpanich	The use of cooling box for native chicken semen transportation in field work.	Department of Livestock Development	Research	2006	<a href="http://www.dld.go.th/breeding/r/49/02_temperature_hen_na.pdf">http://www.dld.go.th/breeding/r/49/02_temperature_hen_na.pdf</a>	B
193	Saengthicha Saengdaoruang	Egg production and hatchability improvement of native chicken under the management of small farm holders.	Chiang Mai University	Thesis	2006	<a href="http://archive.lib.cmu.ac.th/full/T/2549/anim0349ss_abs.pdf">http://archive.lib.cmu.ac.th/full/T/2549/anim0349ss_abs.pdf</a>	B/M
194	Chaiya Sukprasert, Juntana Prasongjaroen, Surat Chaitheangnil, Nongnut Ngoyphala, Yutthana Bunchong, Wissanuwat Chimnoi, Nongnuch Pinyopanuwat and Sathaporn Jittapalapong	Comparative efficacy of anthelmintic effects between three Thai medicinal plants and an anthelmintic drug in native chickens.	Kasetsart University	Research report	2006	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=4914&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=91&amp;option=show&amp;bib=4914&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0</a>	D

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
195	Patanapong Tisong	Effects of herbal feed additive, banana ( <i>Musa Sapientum</i> Linn O. Kutze.) in native crossbred chicken diets on production and coccidia control.	Valaya Alongkorn Rajabhat University	Thesis	2006	<a href="http://dcms.thailis.or.th/dcms/basic.php?institute_code=36&amp;option=show&amp;bib=367&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0">http://dcms.thailis.or.th/dcms/basic.php?institute_code=36&amp;option=show&amp;bib=367&amp;query=%E0%B9%A0%E0%B9%A0&amp;doc_type=0</a>	D/B
196	Witthaya Sumamal, Taweesak Chuenpreecha and Chaisang Phaikaew	Effects of feeding levels on performance of growing native chicken in house.	Department of Livestock Development	Research	2006	<a href="http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2549/R4912.pdf">http://www.dld.go.th/nutrition/Research_Knowledge/RESEARCH/research_full/2549/R4912.pdf</a>	F
197	Sompoch Tubcharoen, Oratai Triwutanon, Suchart Sa-nguanphan, Ornprapun Songserm, Kriangsak Saardrak, Montatip Youngcharrad, Pranom Dechwisissakul, Theerawut Pinthong and Saowalax ponglumjeak	Effect of <i>Pueraria mirifica</i> in Thai native crossbred chickens.	Kasetsart University	Research	2006	<a href="http://kucon.lib.ku.ac.th/FullText/KC4402010.pdf">http://kucon.lib.ku.ac.th/FullText/KC4402010.pdf</a>	F/B
198	Benchavan Siririsawat, Suchon Tangtaweewipat, Boonlom Cheva-Isarakul and Sirin Cha-Amtet	Effect of commercial vs. natural feed fed to native chicks hatched by hens or by electrical incubator in small farms.	Chiang Mai University	Research	2006	<a href="http://kucon.lib.ku.ac.th/FullText/KC4402043.pdf">http://kucon.lib.ku.ac.th/FullText/KC4402043.pdf</a>	M
199	Intr Sarangam	Methods to increase number of Thai indigenous chicks, and patterns of prolactin, LH and estrogen in reproductive cycle of Thai indigenous hens at farm level.	Ubon Ratchanthani University	Research	2006	<a href="http://www.trf.or.th/research/abstract/Eng/RDG4620015E.txt">http://www.trf.or.th/research/abstract/Eng/RDG4620015E.txt</a>	M

No	Authors	Title	Institutions	Paper type	Year	Web site	Category
200	Onanong Pimcomelai, Chusak Prapasawat and Amnuay Leotaragul	Production performance of native chickens in village.	Department of Livestock Development	Research	2006	<a href="http://www.agri.cmu.ac.th/journal/pdf/J00090_C00569.pdf">http://www.agri.cmu.ac.th/journal/pdf/J00090_C00569.pdf</a>	M
201	Sanchai Jaturasitha	Carcass and meat quality of Thai indigenous chicken and their crosses 4 lines.	Chiang Mai University	Research	2007	<a href="http://www.trf.or.th/research/abstract/Eng/RDG4520023E.txt">http://www.trf.or.th/research/abstract/Eng/RDG4520023E.txt</a>	B
202	Supamit Mekchay	Identification of differentially expressed gene in Thai native and broiler chicken muscles.	Chiang Mai University	Research	2007	<a href="http://www.trf.or.th/research/abstract/Eng/MRG4780064E.txt">http://www.trf.or.th/research/abstract/Eng/MRG4780064E.txt</a>	B

# Abstracts of papers in Thai

## 1. Great Kings of Thailand

Prakob Choprakarn

*Ruamkarnpim Publishing Company, Thailand. 708 pp. (1980)*

### Conclusion

This book said about history of great kings of Thailand since settle down of kingdom. This confirmed that Thai indigenous chickens have been Thai people's way of life at least since the [Ayutthaya Kingdom](#) some 400 years ago.

## 2. The Comparison of Castration, Non-castration and Feed Utilization of Crossbreed Chickens

Apichai Ratanavaraha and Permsak Siriwan, Sakol Kaikum and Somkuarn Panyadee

*The Animal Science Research, 21<sup>st</sup> Annual Conference, Kasetsart University. Bangkok, Thailand (1983)*

### **Abstract**

Effects of chicken castration by head injection of Diethylstilbestrol vs. testes removal together with different rations (11, 13, and 15% of protein) on body weight gain and feed utilization were compared. Forty five, 14 weeks old, male indigenous chickens and Rhode Island Reds were used in a 3 x 3 factorial experiment in randomized complete block design.

The experimental results showed that the interaction between the effect of castration and ration was not statistically different. Moreover, the main effect of feeding was also not statistically different, but that of castration was significantly different ( $<0.05$ ). In some weeks of the experiment, feed conversion of the castrated chickens was lower than that of the uncastrated. When compared between castrations (side opening vs. head injection), there was no statistically different.

It was concluded that chicken castration, both head injection and side opening, resulted in better growth rate and feeding efficiency. However, rations of all 3 protein levels did not affect on chicken growth and feed utilization, and did not affect on castration as well.

## 3. Studies on Disease Resistance in Indigenous Chickens 4. Resistance to Fowl Pox

Chedchai Ratanasetthakul, Weerasak Wongsrikeao and Banyat Laupaiboon

*Proceedings of the first seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand (1983)*

### **Abstract**

A study on Fowl Pox resistance was conducted in indigenous chickens, Barred Plymouth Rock, White Rock, crossbreds between indigenous chickens and Rhode Island Red, and crossbreds between indigenous chickens and Barred Plymouth Rock, with and without Fowl Pox vaccination. It was found that, in unvaccinated chickens, mean of disease virulent at 7 and 14 days after challenge of indigenous chickens was markedly lower than those of other chickens. Whereas, in vaccinated chickens, mean of disease virulent at 7 and 14 days after challenge of indigenous chickens was slightly lower than those of other chickens, especially those without vaccination.

#### **4. Study on Cost of Raising Native Chickens with Low Protein Rations**

Apichai Rattanawaraha, Somchit Boonsukchai and Suthat Siri

*The Animal Science Research, 21<sup>st</sup> Annual Conference, Kasetsart University, Bangkok, Thailand (1983)*

##### **Abstract**

A trial was conducted to compare raising native chickens with 2 rations. Ration 1 had only paddy rice, while ration 2 composed of paddy rice and layers ration (2: 1). Completely randomized design was used with 6 replications. Each replication had 6 chickens, therefore 72 chickens in total.

The results showed that chickens received ration 2 had a better growth and feed conversion than those with ration 1. At week 24, chickens received ration 1 had a mean body weight and feed conversion of 717.11 g and 19.8; whereas those received ration 2 had a mean body weight and feed conversion of 1,294.5 g and 7.33, respectively. The relationship between age and body weight of chickens received ration 1 was in a linear fashion, but that of those received ration 2 was a cubic regression.

Comparison between ration cost and return showed that chickens received ration 1 had a lower body weight but also had a lower ration cost. This resulted in a higher profit compared to those received ration 2. In fact, production of native chickens is free range, paddy rice supplement should be sufficient with fewer burdens to the farmers.

#### **5. Problems and Approach relating to Improving of Thai Indigenous Chickens Kreingkrai**

Chopprakarn, Sawat Thummabuttra and Worapong Suriyajantratong

*Proceedings of the first seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand (1983)*

##### **Abstract**

Lack of indigenous chicken know-how of farmers in the rural areas resulted in the very high chicken mortality rate annually. To improve the situation, it was needed to make good recommendations about indigenous chickens to those farmers with practicality in mind.

The current indigenous chicken production system indicated that farmers were having problems in chicken breeding, feeding, housing, diseases and insects. In principle, these problems should be solved simultaneously. However, in practice, selected problems must be solved within a short period of time in order to make trust, stimulate, and acceptance from the farmers. Therefore, in the first phase, emphasize was placed on vaccination to prevent chicken diseases in the target villages. Consequently, chicken mortality rate dropped markedly. Once the farmers had seen the success of vaccination in the first phase, they started to accept new technology which will help improving their indigenous chicken production. To make the farmers be able to help themselves in the long run, they were encouraged to set up a group with supervision provided initially by technicians from the Office of Northeast Agriculture. The results so far were satisfactory, interested farmers who were in the group had a higher number of chickens. They had more chickens for home consumption and some sold their chickens to supplement income. Moreover, some of them were role model for their neighbors and be able to transfer their knowledge in indigenous chickens to other farmers nearby.

#### **6. Marketing system of Thai indigenous chicken at village level**

Kreingkrai Chopprakarn

*Proceedings of the first seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand (1983)*

##### **Abstract**

Farmers from 10 districts, 7 provinces in the northeast of Thailand were interviewed about native chicken consumption and sale in 1982. It was found that all farmers consumed native chickens which were varied from 5-20 birds per household per year but only 66% of them had excess birds for sale approximately 5-30 birds per household per year. Chickens were sold per kilogram of live weight from 1-1.5 kg. and few was culling birds. Most selling occurred in the village only few at wet market which was not far from the village. They would sell their chickens whenever they emergency need cash income and never faced the price problem as other agricultural products.

**7. A Study on Survival Rate and Growth Rate of Thai Indigenous Chickens**  
Kreingkrai Choprakarn, Sawat Thammabutr, Niyomsak Uppatum, and Worapong Suriyachantratong

*The Animal Science Research, 22<sup>nd</sup> Annual Conference, Kasetsart University, Bangkok, Thailand (1984)*

**Abstract**

At present, farmers are more interested in native chicken production. The practices of chicken breeding-selection, vaccination, and management play a major role in lowering the mortality rate and increasing growth rate. However, problem still exists especially in the dry seasons. One to two months old chicks in the rural areas show a sign of pantothenic acid and biotin deficiencies, and death followed after 1-2 weeks. Chick autopsy at the Animal Diseases Diagnosis Center did not reveal any causes. It is speculated that if those chicks had received enough amount of good quality ration, the problem might have been solved. Therefore, a trial was set up at the Regional Office of Agriculture, Khon Kaen during August 1982 to September 1983. Seven hundred and fifty eight native chicks were used. The chicks were divided into 22 groups, each group was 2 weeks apart, and all chicks descended from the same flock of parent stocks. Each group of chicks was in the trial for 16 weeks. Every group received the same rations and vaccines. Rations were divided into 2 phases; they were for 0-8 weeks old chicks (18.2% CP) and 9-16 weeks old chicks (12.8% CP)

The results showed no sign of the above mentions in chickens. The causes of chicken death were due to coccidiosis, parasite, and might be due to stress from weather changing and infectious diseases. The mortality rate during the trial was 18.0%, highest during 0-4 weeks old (49% of the death) then tend to decline. Average daily gain was 13.0 g, and mean body weight at 16 weeks was 1452 g.

**8. A Basis Study of the Performance of Native, Exotic and Crossbred Chickens under Natural Raising Condition**

Apichai Ratanavaraha and Somchit Boonsukchai

*The Animal Science Research, 23<sup>rd</sup> Annual Conference, Kasetsart University, Bangkok, Thailand (1985)*

**Abstract**

Chickens were divided into 2 groups; each group of chickens was in a 2 x 2 factorial in completely randomized design. Factors studied were chicken breeds and age at the beginning. Group 1 composed of native chickens and crossbreds between Rhode Island Red and native chickens. Five chickens of each breed, with a beginning age at 2 months and 8 days, and 3 months and 7 days, were used. Group 2 composed of pure breed and Rhode Island Red chickens. Six chickens of each breed, with a beginning age at 25 days, and 1 month and 22 days, were used. In group 1, average body weight at week 6 of native chickens and crossbreds with a beginning age at 2 months and 8 days were 989 and 1,467 g. For native chickens and crossbreds with a beginning age at 3 months and 7 days, the average body weights were 1,146 and 1,662 g. In group 2, the average body weight of native and Rhode Island Red chickens with a beginning age at 25 days were 583 and 645 g. For native and Rhode Island Red chickens with a beginning age at 1 month and 22 days, the average body weights were 866 and 970 g. In group 2 of native and Rhode Island Red chickens, the interaction between breeds and beginning age including the main effect of breeds and age was not different. Whereas, in group 1 of native chickens and crossbreds, only the main effect of breeds was significantly different. It was found that crossbreds had a better average weight gain than the native chickens, but the main effect of beginning age and the interaction between breeds and beginning age were not different.

### **9. A Preliminary Study on Growth Rate of Native and Native x Rhode Island Red Crossbred Chicken**

Kreingkrai Choprakarn, Worapong Suriyachantratong, Osoth Naksakul, Pitsamai Namdaeng and Udon Senakarn

*The Animal Science Research, 23<sup>rd</sup> Annual Conference, Kasetsart University, Bangkok, Thailand (1985)*

#### **Abstract**

The objective of this study was to compare growth rate of native chickens and crossbreds of native (N) x Rhode Island Red (RIR; both RIR male x N female and N male x RIR female). This study composed of 2 parts; on-station part was done at the Regional Office of Agriculture, Khon Kaen, during March – August, 1984. While the on-farm part was being studied in the villages during October, 1983 – February, 1984, and during July – December, 1984 by providing young chicks to the farmers. Since the on-farm part was in the processes of study, data and information involved were not being reported here.

The trial at the Regional Office of Agriculture, Khon Kaen, used young chicks of all 3 lines. Seventy six chicks of each line, 0-4 weeks old, were used. All chicks of 3 lines were raised together receiving the same feed and management. At 4 weeks old, chicks were divided equally into 2 groups; one group was raised in a concrete floor pen, another in the pasture. Chickens in both groups were further divided equally into 2 subgroups; the first subgroup fed with high protein rations (18 and 15%), the second subgroup fed with low protein rations (15 and 12%) when the chickens reached 5-12 and 13-20 weeks, respectively.

The results showed that the average body weights at 20 weeks old of native chickens, crossbreds of RIR male x N female and N male x RIR female raised in concrete floor pen with high protein rations were 1,857.43, 1,940.06, and 1,941.30 g; whereas those raised with low protein rations were 1,761.60, 1,819.09, and 1,936.92 g. Average body weight of chickens raised in the pasture with high protein rations were 1,852.92, 1,836.46, and 1,996.60 g and those raised with low protein rations were 1,771.67, 1,656.89, and 1,908.04 g, respectively.

### **10. Study on Native Chicken Raising in Chaiphum**

Banyat Laopaiboon, Cherdchai Ratanasetthakul and Prapart Neramitmansook

*KhonKaen Agriculture Journal. Vol. 14 (1986)*

#### **Abstract**

Farmers from Chaiphum were interviewed about native chicken production. It was found that most of these farmers had more than 10 year experience in native chicken production. Their production's objective was for home consumption and sale. Methods of sale varied according to the location; farmers from Laharn district sold their chickens by weight, while farmers from Kwangjon sold their chickens by looking at each bird and then agreement made. Most farmers had pens for their native chickens. Chickens received husked and dehusked rice scattered on the ground daily, and the birds got access to both clean water and sewage. The most important problem was diseases causing high chicken mortality in April (Laharn district) and in January to February (Kwangjon district). About half of these farmers treated their chickens offhand, for example using human medicines to treat their chickens. When a chicken died, the farmer might bury, consume and throw the bird away. Only few farmers vaccinated, dewormed, treat external parasites for their native chickens.

### **11. Causes of Indigenous Chickens' Death**

Wimonporn Thitisak, Nimitr Leesirikul, Puttachat Srisopa, Manwika Pholpak and Somchai Srihakim

*Proceedings of the 2<sup>nd</sup> seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand (1988)*

#### **Abstract**

Northeast Animal Diseases Research and Diagnosis Center in collaboration with the Thai-German Animal Health Project did a survey about indigenous chicken health and production in 12 villages of 4 provinces in the Northeast. Samples of dead chickens were taken back for laboratory diagnoses. The survey's results in 1987 (B.E. 2530) showed that the mortality

rates of chickens under 2, 2-6, and over 6 months old were 41, 6.1, and 2.7%, respectively. The major diseases were New Castle, Infectious coryza, Cholera, Chicken Pox, and other bacterial diseases. The results were counted according to the age groups and mortality rate per 100 chickens.

## 12. Survival Rate of Native Chickens after Vaccination

Kreingkrai Choprakarn, Sarote Khacharoen, Worapong Suriyajantratong, Apichai Siwaprapakorn, Komkrit Kaewsumran and Koakiet Cimmalee

*Proceedings of the 2<sup>nd</sup> seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand (1988)*

### Abstract

The objective of this study was to find out method and approach in order to develop suitable vaccination programs for native chickens. Collaboration with farmers was done in 3 provinces; namely Khon Kaen, Maha Sarakham, and Nakhon Ratchasima. A representative village was selected from each province and 4 families were selected from each village resulting in 12 families. Data obtained from 1,380 native chicks hatched out during May 1986 to April 1987. Every chick was vaccinated and dewormed by the farmer as follows: strain F New Castle with Chicken Pox vaccines (chicks less than 1 month old), strain F New Castle with Cholera vaccines (chickens 3 months old), and deworming twice (chickens 1.5-2.0 and 2.5-3.0 months old).

It was found that the survival rate of native chicks, from new born to 4 months old, was 77.6% (22.4% mortality rate). The mortality rate of chicks was highest during 1-2 months olds (11.0%); and more than half of the dead chicks due to respiratory diseases, especially Infectious coryza. Chicks hatched out during March-July had higher mortality rate compared to those from other months.

## 13. Studies of Selected Herbs and Chemicals for Ectoparasit Eradication in Indigenous Chickens

Cherdchai Ratanasetthakul and Banyat Laopaiboon

*Proceedings of the 2<sup>nd</sup> seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand (1988)*

### Abstract

Tuba (*Derris elliptica*) roots, Sugar apple (*Annona squamosa*) leaves, *Stemona* spp. leaves, kerosene, 10% sulfur wax, and Carbaryl were studied for getting rid of tick/flea in 2-4 weeks old indigenous chicks by daily rubbing for one, two, or three consecutive days. The results showed that Carbaryl and kerosene gave the best result for every treatment. Tuba roots, sugar apple leaves, and 10% sulfur wax came second; whereas *Stemona* leaves was least satisfactory, two or three applications were needed.

## 14. Effect of Nutrition on Carcass Composition of Indigenous Chickens Suwit

Theerapantuwat, Pitak Sripraya, and Sompong Chaibhud

*Proceedings of the 2<sup>nd</sup> seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand (1988)*

### Abstract

New hatchlings to 20 weeks old indigenous chickens fed with 14, 15, 16, and 17% protein feeds were observed. Growth rates, feed conversion ratio, and protein conversion ratio in each growth stage were not significantly different. The chicken body weight at 16 weeks old was 1,200 g with 78.41% dressed carcass and meat to live weight was 36.06%. Average growth rate (g/chick/day), feed conversion ratio, and protein conversion ratio were 12, 3.19, and 1.64, respectively.

**15. Comparison between Local Feed Supplemented with Vitamin-mineral Premix and Local Feed Supplemented with Concentrate for Egg Layers on the Production Efficiency of Indigenous Chickens**

Yaouwaman Khacharoen, Sarote Khacharoen, Sompong Chaibhud, Pitak Sripraya, Yongyot Saingam, Pannasri Sakiya and Apivhai Siwaprapakorn

*Proceedings of the 2<sup>nd</sup> seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand (1988)*

**Conclusions**

Treatment	Local feed + premix	Local feed + concentrate	Remark
1. Age at egg laying (days)	195.5	187.75	
2. Weight gain of parent stocks	high	higher	
3. No. of eggs/chicken	15.5-17.1	15.5-17.1	NS
4. ? and hatchability rates	NS	NS	Male: female = 1: 5 and 1: 7; no effect on ? rate
5. Feed consumed (g)	72.75	71.65	NS
6. Egg weight (g)	42.80-44.40	42.80-44.40	NS
7. Weight gain of hen + egg weight (g)	1,112	1,034	
8. Feed conversion ration	9.36	8.56	NS
9. Production cost	lower	higher	

The experimental results showed that local feed supplemented with vitamin-mineral premix was sufficient for the requirement of indigenous chickens. Production cost could be reduced and the results could be applied for smallholders.

**16. Native Chickens under Farmer System in the North East Region**

Sawat Thummabutr, Pitaya Namdang and Weerachai Potiwara

*Proceedings of the 2<sup>nd</sup> seminar on Thai indigenous chickens. Northeastern Regional Office of Agriculture, Khon Kaen, Thailand (1988)*

**Abstract**

Native hens raised under the village conditions in the North East laid 3 clutches of eggs/year and each clutch gave 7 hatchlings. A typical hen, then, produced 19 chicks a year. Hatching percentage was lowest in April, only 37%, probably due to the hot weather and lack of important nutrition, such as protein and vitamin B's, for the hens. Daily growth rate of a hatchling was 10.48 g; a chick reached 1,218 g of body weight at four and a half months old. Heritability estimated from hens was 0.26. Evaluation of extension work including farmers' acceptance of disease prevention through group approach showed that disease prevention program reduced chicken mortality rate markedly from 80-90% down to 10-25%. Consequently, the number of chickens in the flock rose to 36-48 chicken/household. From this point onward, however, the farmers would face the problem of chicken mortality the same as at the project's beginning but due to a different cause. Death of chickens during this period due to inappropriate management; lack of feed due to the imbalance flock size and feed supplement causing death of small chickens. Prolong of too large a flock size, the whole flock of chickens might die. It was, therefore, suggested that broilers at 4 months old and up or at a body weight of 1.0-1.2 kg should be culled off for sale or home consumption. This would give a chance for young and/or small chicks to grow up.

### **17. Indigenous Chicken Production Systems in Udon Thani**

Wimonporn Thitisak, Orawan Janewiriyasopak, Malee Meka, Pratheep Laksanaporn  
Thepkraiwan, Kasem Chongsateint and Somchai Srihakim

*Proceedings of the 2<sup>nd</sup> seminar on Thai indigenous chickens. Northeastern Regional  
Office of Agriculture, Khon Kaen, Thailand (1988)*

#### **Abstract**

Northeast Animal Diseases Research and Diagnosis Center in collaboration with Thai-German Animal Health Project did a survey about health and production of indigenous chickens in 4 villages in Non Sa-at District, Udon Thani. A monthly survey (once a month) for one year showed that, in average, a family had 1.67 roosters and 4.91 hens. A hen, in average, laid 29.69 eggs/year; these eggs hatched out 21.91 hatchlings (73.79%). The mortality rate of under 2 months old chicks was 37.42 to 100 chicks and that of more than 2 months old was 5.36 to 100 chicks. Each year a family might consume 21.14 chickens; and might give out, sell, buy, and receive in 0.49, 0.45, 0.32, and 0.17 chickens, respectively. In addition, a family might also lose 0.36 and 0.07 chick and chicken, respectively.

### **18. Indigenous Chicken Production in the Farming Systems of Rain-fed Areas**

Wirote Chonwiriyaikul, HansaThitipoka, Sumalee Lai rungreung and Chettapong Nontapan

*Proceedings of the 2<sup>nd</sup> seminar on Thai indigenous chickens. Northeastern Regional  
Office of Agriculture, Khon Kaen, Thailand (1988)*

#### **Abstract**

Production of indigenous chickens is a very important part for the living of farmers in the rural areas; it was, therefore, introduced as an activity in the integrated farming system in the rain-fed areas of Nong Mamong village, Wat Sing District, Chai Nat. The project's objective was to demonstrate the production system of indigenous chickens for sale to generate supplement income and also for home consumption. The project started in January 1985 (B.E. 2528) until December 1987 (B.E. 2530). Two fighting cocks and 10 indigenous hens were used. Housing had thatch roof, bamboo walls, and rice husk bedding. A 2.4 ha farm was divided into 1.6 ha for field crops, 0.5 ha for fruit trees, and 0.3 ha for farmhouse. Surroundings of the farmhouse were for vegetables, indigenous chickens, Muscovy ducks, and pigs; compost and bio-gas productions also included. Indigenous chickens were fed with at least 27% protein feeds mixed with paddy (1: 4); for new hatchlings up to 1 month old chicks, broken rice mixed with concentrate at the same ratio was used. Feed was provided in the morning and evening, chickens were also scavenging around for natural feeds in the farm. In the afternoon, fresh leucaena was supplemented daily. Vaccination and deworming were done. Young chicks at 1 month old were separated from the hen and let grow further up to 18 to 20 weeks for sale or consumption. Data of labor used was also recorded.

### **19. Increasing Protein and Additional Income for Prathom Suksa VI Students in the Village by Native Chicken Raising**

Cherdchai Ratanasetthakul, Wansa Suksawat, Pornchai Sombatchaisak and Orawan Pisansarakit

*Annual report, Khon Kaen University (1991)*

#### **Abstract**

The objective of this project was to train Prathom Suksa (Grade) 6 students in vaccination for important chicken diseases. This would reduce mortality rate of indigenous chickens resulting in the surplus chickens for protein rich meals and additional income for the families.

This project was done by training Prathom Suksa 6 students in 3 schools; they were Ban Huay Som Tai School, Phu Kradueng District, Loei; Ban Na Mool Toon School, Phu Luang District, Loei; and Ban Nok Hoa School, Yang Sisurat Sub-district, Maha Sarakham. After training, student groups were formed to produce indigenous chickens at their homes. Vaccination for important diseases and deworming were done. Data involving the number of chicks at the beginning; number of chicks died, consumed, and sold were also recorded for a period of 8 months.

The results were satisfactory; students were able to vaccinate chickens. During the period of 8 months [March-October 1990 (B.E. 2533)] of indigenous chicken production by students Ban Huay Som Tai School students consumed 89, sold 31, and had 366 chickens left; Ban Na

Mool Toon School students consumed 266, sold 74, and had 462 chickens left; and Ban Nok Hoa School students consumed 269, sold 88, and had 686 chickens left.

## **20. Growth Rates of Crossbreds of Indigenous Chicken x Rhode Island Red, Indigenous Chicken x Barred Plymouth Rock, Indigenous Chicken x Chiang Mai 1, and Indigenous Chicken x Chiang Mai 2 under Village Conditions**

Somkuarn Panyawee and Siripan Morathop

*J. Animal husbandry Vol 6. No. 33. May-June, 1996*

### **Conclusion**

Crossbreds of indigenous chicken X Rhode Island Red, indigenous chicken x Barred Plymouth Rock, indigenous chicken x Chiang Mai 1, and indigenous chicken x Chiang Mai 2 were allocated to the farmers in the rural area. It was found that growth rate, body weight and mortality rate of all 4 crossbreds were not statistically different ( $P > 0.05$ ). The body weights at 12 weeks of these crossbreds were 808.90, 790.70, 781.70, and 773.38 g, respectively; and the daily growth rates were 9.16, 8.97, 8.84, and 8.74 g/chick; and the mortality rates were 6, 6, 6, and 3 percent, respectively.

## **21. Development of Thai indigenous chickens and cross bred of Thai indigenous chickens production: A review of the literature**

Kreingkrai Choprakarn, Watcharapong Wattanakul, Kitti Wongpichet, and Worapong Suriyachantratong

*Technical report submitted to Thailand Research Fund. 52 pp. (1998)*

### **1 Conclusions**

1.1 Indigenous chickens have some strong points and are suitable for farmers' home consumption and for sale in case of surplus production. To supplement income, the farmers should raise their chickens in their fields. This reduces the problem of diseases and also increases the production spaces. Consequently, more chickens can be produced.

1) In the current situation of indigenous chicken production, there is a potential to increase the production from 20-30% to 50-60% by ways of minimum impact on the farmers' production systems as follows:

(1) Increasing number of clutches to increase laying rate per hen per year by reducing the duration of reproductive cycle.

(2) Reducing the chicken mortality rate by vaccination (Fowl Pox, New Castle and Fowl Cholera), but the vaccination program should be adjusted and urgent help is required to purchase vaccines and related equipment.

(3) Supporting and educating the farmers in order to employ agricultural by-products and insect pests as indigenous chicken feeds instead of commercial rations. Herbs should also be used for parasite prevention.

2) Marketing systems for indigenous chickens are doing well, since there is no monopoly and the benefits are distributed extensively. Therefore, community markets should be encouraged.

1.2 Crossbreds of indigenous chickens, only under good management conditions, have a higher production efficiency compared to indigenous chickens. However, under the rural area conditions, indigenous chickens perform better in all aspects. Therefore:

1) Crossbreds are not good for free-range production under natural conditions as indigenous chickens. They should be penned in an "all in – all out" system. Any "leftovers" remained in the farm; they may mate with the local chickens causing long term deleterious effects. Good and important characteristics, such as disease resistance, hatchability and survival ability, of indigenous chickens may disappear. Moreover, in some areas, sale prices of the chickens may go down.

2) Crossbreds are suitable for commercial production for "upper markets" and export. To increase the chickens' growth rate, selection and breeding might be a better method compared to by way of feed improvement. This is to maintain the chickens' good characteristic that is meat texture.

## **2 Recommendations**

2.1 Research framework is divided into two categories as follows:

1) Basic research should be done to find out why indigenous chickens are able to adapt well and survive under the rural area conditions, and where is the maximum production potential. The information obtained can be used for further research work.

(1) Studies should be carried out and also good genotypic collection of indigenous chickens, for example disease resistance, heat stress tolerance, ability to use low quality feed, and hatchability.

(2) Studies should also include behavior, digestive system, and reproductive system of indigenous chickens.

2) Applied research includes:

(1) On-farm studies including more economic and social evaluations.

(2) Finding out natural protein sources, especially for 1-2 months old chicks. This is a critical period of indigenous chickens.

(3) Local wisdom concerning herbs for disease prevention and treatment.

(4) Indigenous chickens as a component in the integrated farming.

2.2 Development approach:

1) The government should fully support and give high priority to follow-up and evaluate, during and especially at the end of, the projects. This is to learn the factors affecting on the farmers' acceptance and to distribute and use this information for further policy.

2) The development program should emphasize on the farmers' self reliance instead of giveaway of chickens or vaccines and related equipment. The program should have local related organization get involved.

3) The "Chicken Diseases Free Village Project" run by the Department of Livestock Development was a very useful project, further support should be continued.

### **21. Economic Returns of the Production of Indigenous Chicken and Crossbreds of Indigenous-Rhode Island Red**

Amnuay Leotaragul and Onanong Pimkumlai

*J. Animal husbandry (5th Regional). Vol 3. No. 1 Febuary-June, 1999*

#### **Conclusion**

Indigenous chickens fed with layers feed and sold at 16 weeks old gave highest profit. At this age, chicken weight was 1,361 g. The production of crossbreds fed with the same feed gave highest profit when sold at 12 weeks old. The crossbred weight was 1,395 g.

### **22. The role of vaccine for highly pathogenic Avian Influenza (HPAI) subtype H5N1 control in poultry in Thailand**

Porntipa Lekchareonsuk, Chalermpon Lekchareonsuk, Tipawan Thanapaisan and Wantanee Thommued

*The Ammarin Printing & Publishing Company. Thailand. 93 pp. (2006)*

#### **Conclusion**

The objective of this scientific document was to provide the suggestions of vaccine usage for HPAI H5N1 prevention and control in Thailand. The summarizes are as follows:

1. Provide vaccination for high susceptibility to viral contact groups.
2. Expend the development of compartmentalization system.
3. Continually educate the poultry farmers regarding to self-protection and disease monitoring.
4. Strengthen six major standard measures, particularly development of the proactive monitoring and surveillance systems.

5. Increase number and potential of human resources in regard to animal husbandry or in Department of Livestock Development.
6. Accelerate research and development subjects that need for Thailand.
7. Develop the disease control plan fro small-scale and domestic backyard poultry.
8. Develop system for enhancing and coordinating with international network for cooperation.