

## **Wildlife trade and consumer preference for species rarity: an examination of caged-bird markets in Sumatra**

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## Appendix A1. Rarity status of selected species

Species set	Species number	Scientific name	Local name(s)	Group	Rarity measure [#1] in million km <sup>2</sup> distribution	Rarity measure [#2] in number of birds observed	Number of birds sold (trader data)
1	1	<i>Aegithina tiphia</i>	Sertu/Sirpu	HOS0T0	440.26	36	43
	2	<i>Prinia familiaris</i>	Ciap-Ciap/Ciblek/Ciblek Jawa/Ciblek Kristal	HOS0T1	366.50	138	1129
	3	<i>Psilopogon rafflesii</i>	Takur	HOS1T0	156.82	1	36
	4	<i>Pycnonotus squamatus</i> *	Cica Sisik/Kutilang Batik/Kutilang Broyasa	HOS1T1	93.24	0	23
	5	<i>Irena puella</i>	Cica Biru/Cucak Biru	H1S0T1	449.24	2	238
	6	<i>Chloropsis venusta</i>	Cica Ranting Emas	H1S1T0	121.13	0	75
	7	<i>Alophoixus ochraceus</i>	Cica Jenggog Jawa/Jenggog Jawa/Kapas Tembak	H1S1T1	50.47	0	1661
	8	<i>Eurystomus orientalis</i>	Tengkek Buto	H1S0T0	449.24	12	15
2	1	<i>Ploceus manyar</i>	Manyar	HOS1T1	0.02	0	1265
	2	<i>Treron oxyurus</i>	Punai	HOS1T0	90.48	0	41
	3	<i>Pycnonotus plumosus</i>	Berbah Hutan/Merebah Hutan	HOS0T0	398.17	144	21
	4	<i>Geopelia striata</i>	Ketiran/Kutut/Perkutut/Perkutut Titiran	HOS0T1	389.44	185	3129
	5	<i>Cissa chinensis</i> *	Cica Keling	H1S1T1	159.85	0	304
	6	<i>Ixos malaccensis</i>	Siri-Siri Besar	H1S1T0	234.67	0	91
	7	<i>Gracula religiosa</i> *	Beo	H1S0T0	442.37	7	179
	8	<i>Platylophus galericulatus</i>	Cica Lilin/Cililin/Cucak Lilin	H1S0T1	449.24	2	365
3	1	<i>Pycnonotus aurigaster</i>	Kutilang/Kutilang Biasa/Kutilang Putih	HOS0T1	436.12	394	754
	2	<i>Spilopelia chinensis</i>	Balam Hutan/Balam Jambi	HOS0T0	436.27	105	29
	3	<i>Pycnonotus bimaculatus</i> *	Berbah Wilis/Cica Wilis/Cucak Wilis/Larak Tintin/Merbah Wilis	HOS1T0	75.77	0	123
	4	<i>Acridotheres javanicus</i>	Jalak/Jalak Biasa/Jalak Hitam/Jalak Kerbau/Jalak Kerbo	HOS1T1	0.00	36	4636
	5	<i>Chloropsis cyanopogon</i>	Cica Hijau Mini/Cica Ijo Mini/Cucak Hijau Mini	H1S0T1	385.77	3	288
	6	<i>Dicrurus paradiseus</i>	Rajo Burung/Sawe/Srigunting	H1S0T0	449.24	82	76
	7	<i>Leiothrix argenteauris</i> *	Cantik Warna/Panca Warna	H1S1T0	57.636	0	33
	8	<i>Chloropsis sonnerati</i> *	Cica Daun/Cica Hijau/Cica Ijo/Cica Daun Besar/Cucak Hijau/Cucak Ijo	H1S1T1	361.05	1	5108
4	1	<i>Chalcophaps indica</i>	Limbuk/Limbuk Tanah/Punai Tanah	HOS0T0	436.09	83	18
	2	<i>Turnix suscitator</i>	Puyuh	HOS1T0	310.65	0	149
	3	<i>Aethopyga siparaja</i>	Kolibri Ferrari	HOS0T1	449.24	31	641
	4	<i>Acridotheres javanicus</i>	Jalak/Jalak Biasa/Jalak Hitam/Jalak Kerbau/Jalak Kerbo	HOS1T1	0.00	36	4636
	5	<i>Cyornis turcosus</i>	Teledakan	H1S1T0	123.72	1	16
	6	<i>Oriolus chinensis</i> *	Kepodang	H1S0T0	449.63	1	90
	7	<i>Alophoixus ochraceus</i>	Cica Jenggog Jawa/Jenggog Jawa/Kapas Tembak	H1S1T1	50.47	0	1661
	8	<i>Copsychus saularis</i> *	Kacer/Murai Tai/Murai Tanah	H1S0T1	449.24	11	3251

Notes: Source of bird distribution (rarity measure 1): <http://www.birdlife.org/datazone/species>. (Last accessed 19 Feb. 2016). \* Species with declining population according to Harris *et al.* (2015).

## Appendix A2. Price levels shown in the choice experiment cards

Species set	Species number	Scientific name	Group	Sales price in '000 Rp per bird (Source: trader data 2013-2015*)		Price levels in ('000 Rp per bird) shown in the choice experiment (Developed based on trader survey in 2013)				
				Mean	Coefficient of variation	P1	P2	P3	P4	P5
1	1	<i>Aegithina tiphia</i>	HOS0T0	62	0.35	60	72	80	88	100
	2	<i>Prinia familiaris</i>	HOS0T1	81	0.28	34	41	45	50	56
	3	<i>Psilopogon rafflesii</i>	HOS1T0	67	0.30	41	50	55	61	69
	4	<i>Pycnonotus squamatus</i>	HOS1T1	40	0.56	23	27	30	33	38
	5	<i>Irena puella</i>	H1S0T1	343	0.55	90	108	120	132	150
	6	<i>Chloropsis venusta</i>	H1S1T0	182	0.21	128	153	170	187	213
	7	<i>Alophoixus ochraceus</i>	H1S1T1	329	0.15	285	342	380	418	475
	8	<i>Eurystomus orientalis</i>	H1S0T0	791	0.46	450	540	600	660	750
2	1	<i>Ploceus manyar</i>	HOS1T1	35	0.20	19	23	25	28	31
	2	<i>Treron oxyurus</i>	HOS1T0	No data available from trader survey		23	27	30	33	38
	3	<i>Pycnonotus plumosus</i>	HOS0T0	34	0.57	30	36	40	44	50
	4	<i>Geopelia striata</i>	HOS0T1	135	0.43	38	45	50	55	63
	5	<i>Cissa chinensis</i>	H1S1T1	363	0.10	225	270	300	330	375
	6	<i>Ixos malaccensis</i>	H1S1T0	218	0.29	300	360	400	440	500
	7	<i>Gracula religiosa</i>	H1S0T0	834	0.21	398	477	530	583	663
	8	<i>Platylophus galericulatus</i>	H1S0T1	867	0.15	675	810	900	990	1125
3	1	<i>Pycnonotus aurigaster</i>	HOS0T1	42	0.24	20	24	27	30	34
	2	<i>Spilopelia chinensis</i>	HOS0T0	38	0.62	26	32	35	39	44
	3	<i>Pycnonotus bimaculatus</i>	HOS1T0	85	0.59	41	50	55	61	69
	4	<i>Acridotheres javanicus</i>	HOS1T1	171	0.51	45	54	60	66	75
	5	<i>Chloropsis cyanopogon</i>	H1S0T1	184	0.29	113	135	150	165	188
	6	<i>Dicrurus paradiseus</i>	H1S0T0	No data available from trader survey		225	270	300	330	375
	7	<i>Leiothrix argentauris</i>	H1S1T0	381	0.10	263	315	350	385	438
	8	<i>Chloropsis sonnerati</i>	H1S1T1	521	0.34	338	405	450	495	563
4	1	<i>Chalcophaps indica</i>	HOS0T0	No data available from trader survey		21	25	28	31	35
	2	<i>Turnix suscitator</i>	HOS1T0	56	0.09	30	36	40	44	50
	3	<i>Aethopyga siparaja</i>	HOS0T1	102	0.11	38	45	50	55	63
	4	<i>Acridotheres javanicus</i>	HOS1T1	171	0.51	45	54	60	66	75
	5	<i>Cyornis turcosus</i>	H1S1T0	248	0.49	150	180	200	220	250
	6	<i>Oriolus chinensis</i>	H1S0T0	197	0.21	150	180	200	220	250
	7	<i>Alophoixus ochraceus</i>	H1S1T1	329	0.15	285	342	380	418	475
	8	<i>Copsychus saularis</i>	H1S0T1	431	0.20	300	360	400	440	500

\* Adjusted for inflation.

### **Appendix A3.** Choice experiment cards

CARD I

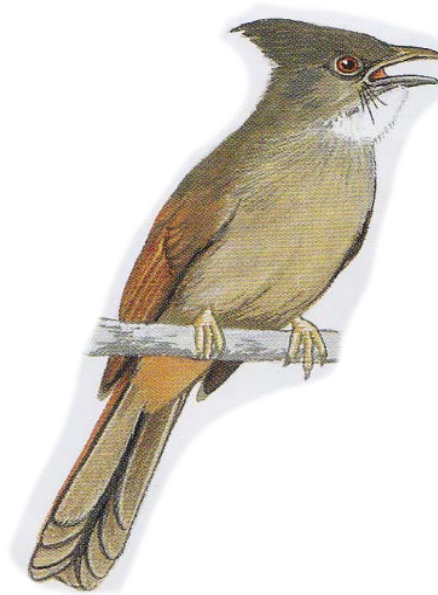
**KUTILANG BATIK**



PRICE: 27 RIBU  
SCARCE IN SUMATRA  
WILD  
CANNOT LEARN SINGING

CARD II

**KAPAS TEMBAK**



PRICE: 285 RIBU  
SCARCE IN SUMATRA  
BRED  
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**SERTU / SIRPU**



PRICE: 72 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**KUTILANG BATIK**



PRICE: 38 RIBU

SCARCE IN SUMATRA

BRED

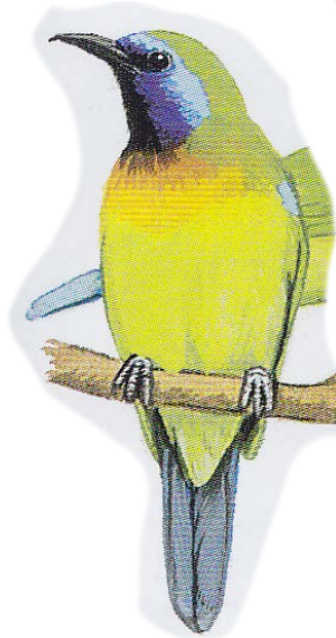
CANNOT LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**CICA RANTING EMAS**



PRICE: 170 RIBU

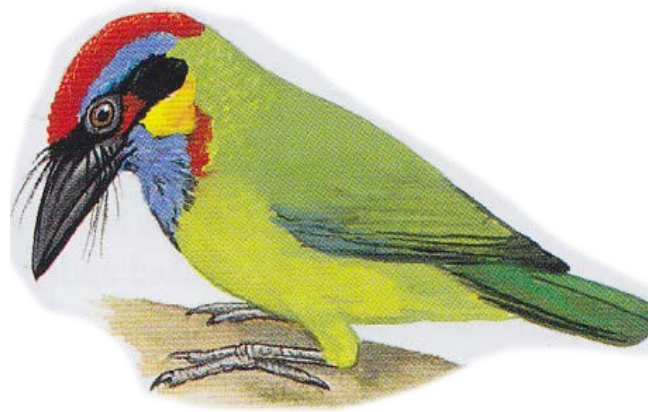
SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**TAKUR**



PRICE: 50 RIBU

SCARCE IN SUMATRA

BRED

CANNOT LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

**CARD I**

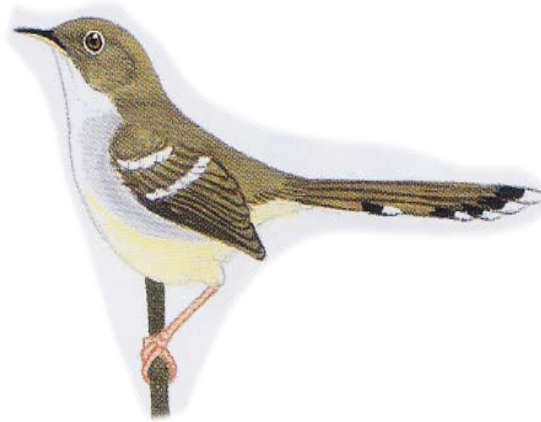
**KUTILANG BATIK**



PRICE: 33 RIBU  
SCARCE IN SUMATRA  
BRED  
CANNOT LEARN SINGING

**CARD II**

**CIBLEK**



PRICE: 45 RIBU  
ABUNDANT IN SUMATRA  
WILD  
CAN LEARN SINGING

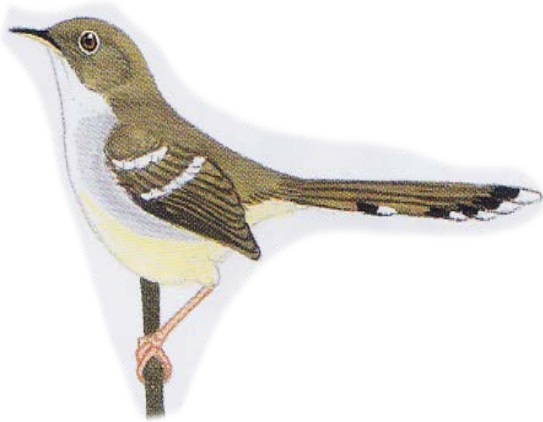
**CARD III**

**NEITHER BIRD I NOR II**



CARD I

**CIBLEK**



PRICE: 41 RIBU

ABUNDANT IN SUMATRA

WILD

CAN LEARN SINGING

CARD II

**CICA BIRU**



PRICE: 150 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

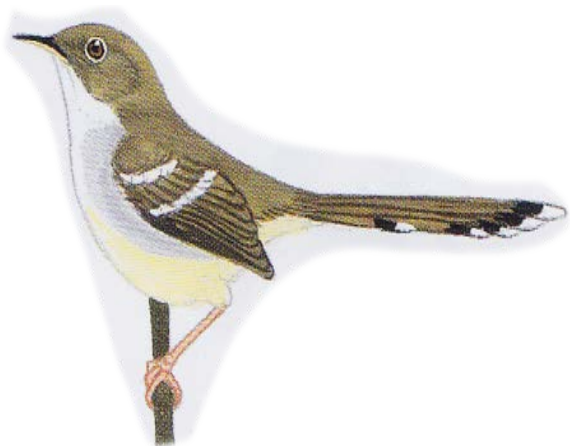
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

**CARD I**

**CIBLEK**



PRICE: 56 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

**CARD II**

**KAPAS TEMBAK**



PRICE: 285 RIBU

SCARCE IN SUMATRA

WILD

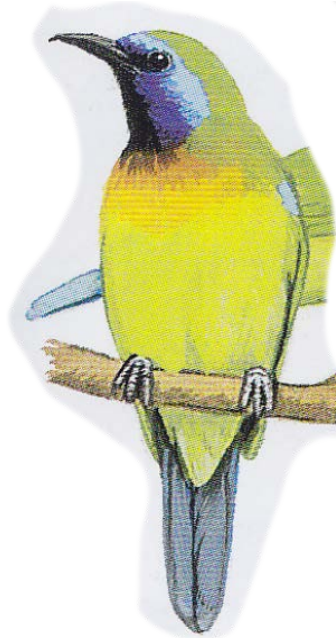
CAN LEARN SINGING

**CARD III**

**NEITHER BIRD I NOR II**

CARD I

**CICA RANTING EMAS**



PRICE: 187 RIBU  
SCARCE IN SUMATRA  
BRED  
CAN LEARN SINGING

CARD II

**SERTU / SIRPU**



PRICE: 60 RIBU  
ABUNDANT IN SUMATRA  
NO INFORMATION ON WILD / BRED  
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**TENGKEK BUTO**



PRICE: 540 RIBU

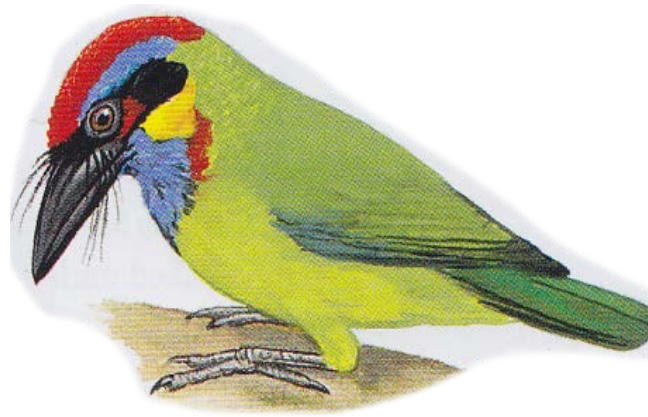
ABUNDANT IN SUMATRA

WILD

CAN LEARN SINGING

CARD II

**TAKUR**



PRICE: 55 RIBU

SCARCE IN SUMATRA

BRED

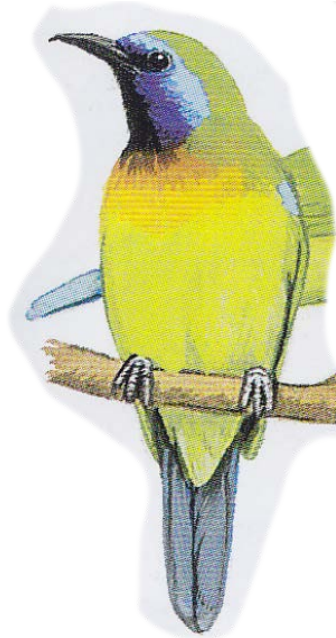
CANNOT LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

**CARD I**

**CICA RANTING EMAS**



PRICE: 128 RIBU  
SCARCE IN SUMATRA  
WILD  
CAN LEARN SINGING

**CARD II**

**TENGKEK BUTO**



PRICE: 600 RIBU  
ABUNDANT IN SUMATRA  
BRED  
CAN LEARN SINGING

**CARD III**

**NEITHER BIRD I NOR II**

CARD I

**SERTU / SIRPU**



PRICE: 100 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**KAPAS TEMBAK**



PRICE: 380 RIBU

SCARCE IN SUMATRA

WILD

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**KUTILANG BATIK**



PRICE: 27 RIBU

SCARCE IN SUMATRA

WILD

CANNOT LEARN SINGING

CARD II

**TENGKEK BUTO**



PRICE: 660 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**



CARD I

**KUTILANG BATIK**



PRICE: 23 RIBU

SCARCE IN SUMATRA

WILD

CANNOT LEARN SINGING

CARD II

**CICA BIRU**



PRICE: 108 RIBU

ABUNDANT IN SUMATRA

BRED

CAN LEARN SINGING

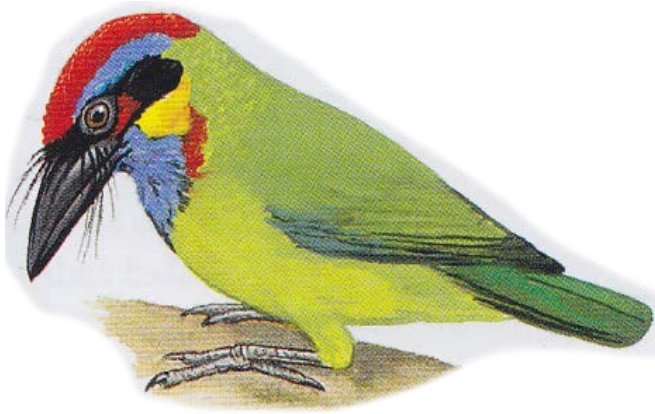
CARD III

**NEITHER BIRD I NOR II**



CARD I

**TAKUR**



PRICE: 61 RIBU

SCARCE IN SUMATRA

WILD

CANNOT LEARN SINGING

CARD II

**KAPAS TEMBAK**



PRICE: 342 RIBU

SCARCE IN SUMATRA

BRED

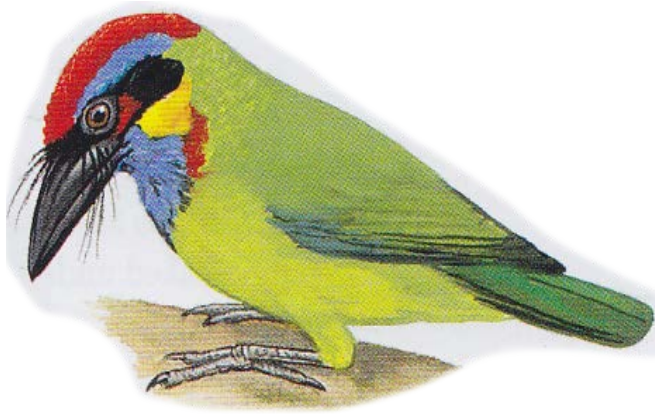
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**TAKUR**



PRICE: 50 RIBU

SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CANNOT LEARN SINGING

CARD II

**SERTU / SIRPU**



PRICE: 88 RIBU

ABUNDANT IN SUMATRA

WILD

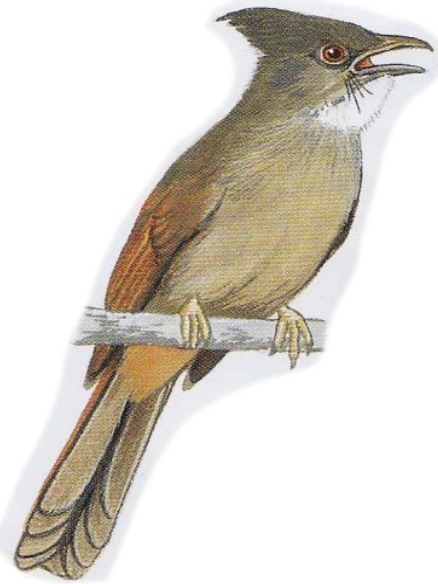
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**KAPAS TEMBAK**



PRICE: 418 RIBU

SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**CICA BIRU**



PRICE: 90 RIBU

ABUNDANT IN SUMATRA

BRED

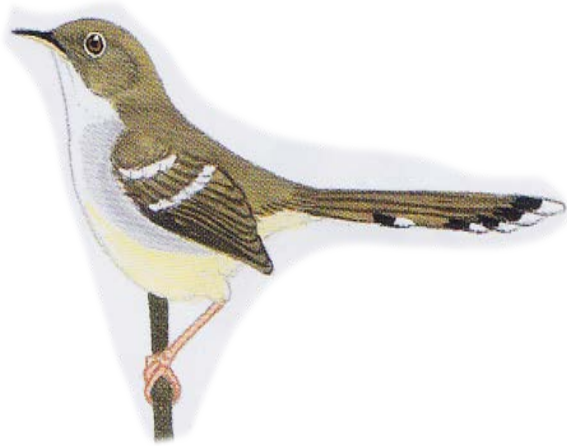
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**CIBLEK**



PRICE: 34 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**SERTU / SIRPU**



PRICE: 80 RIBU

ABUNDANT IN SUMATRA

BRED

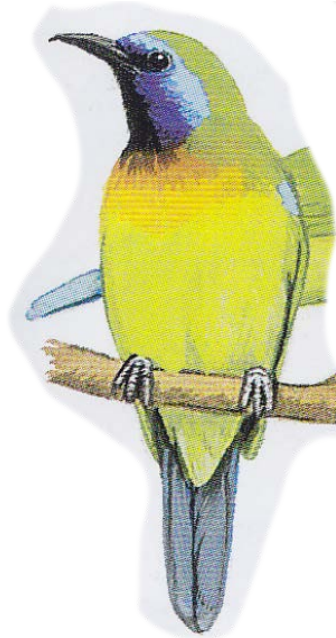
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**CICA RANTING EMAS**



PRICE: 153 RIBU

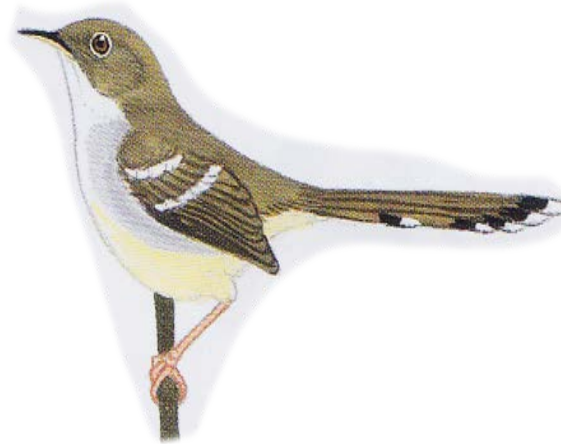
SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**CIBLEK**



PRICE: 56 RIBU

ABUNDANT IN SUMATRA

BRED

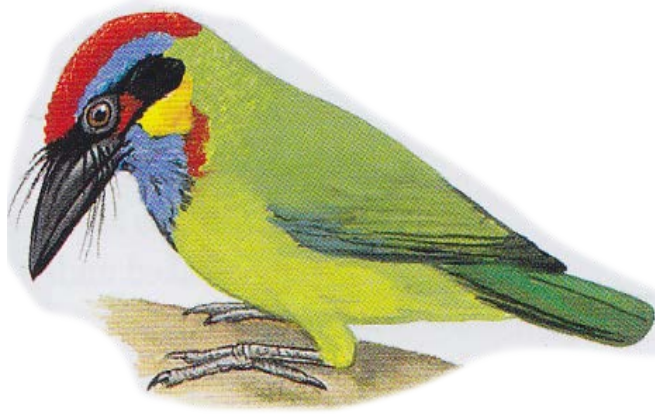
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

TAKUR



PRICE: 69 RIBU  
SCARCE IN SUMATRA  
WILD  
CANNOT LEARN SINGING

CARD II

KUTILANG BATIK



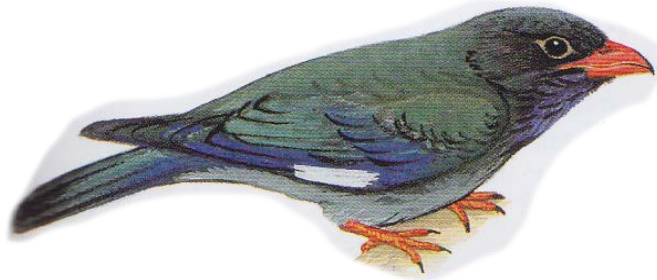
PRICE: 30 RIBU  
SCARCE IN SUMATRA  
NO INFORMATION ON WILD / BRED  
CANNOT LEARN SINGING

CARD III

NEITHER BIRD I NOR II

CARD I

**TENGKEK BUTO**



PRICE: 450 RIBU  
ABUNDANT IN SUMATRA  
BRED  
CAN LEARN SINGING

CARD II

**CICA BIRU**



PRICE: 120 RIBU  
ABUNDANT IN SUMATRA  
WILD  
CAN LEARN SINGING

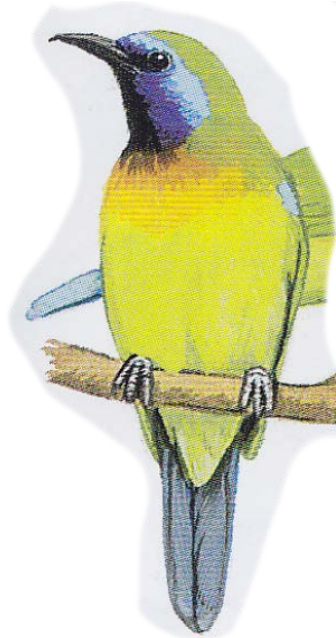
CARD III

**NEITHER BIRD I NOR II**



**CARD I**

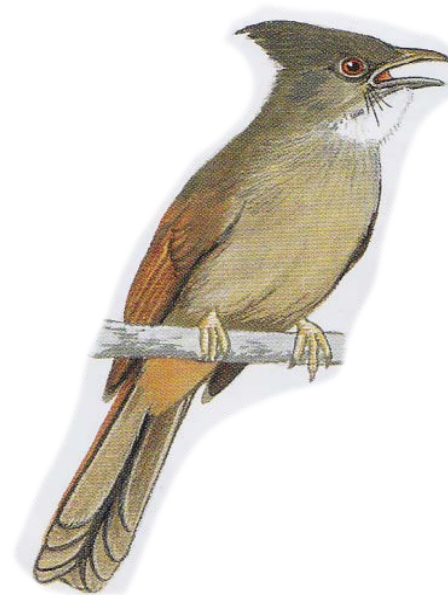
**CICA RANTING EMAS**



PRICE: 128 RIBU  
SCARCE IN SUMATRA  
BRED  
CAN LEARN SINGING

**CARD II**

**KAPAS TEMBAK**



PRICE: 475 RIBU  
SCARCE IN SUMATRA  
WILD  
CAN LEARN SINGING

**CARD III**

**NEITHER BIRD I NOR II**



CARD I

**TENGKEK BUTO**



PRICE: 750 RIBU

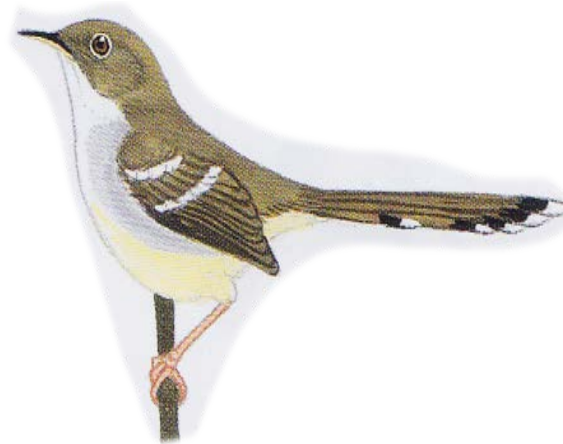
ABUNDANT IN SUMATRA

WILD

CAN LEARN SINGING

CARD II

**CIBLEK**



PRICE: 50 RIBU

ABUNDANT IN SUMATRA

BRED

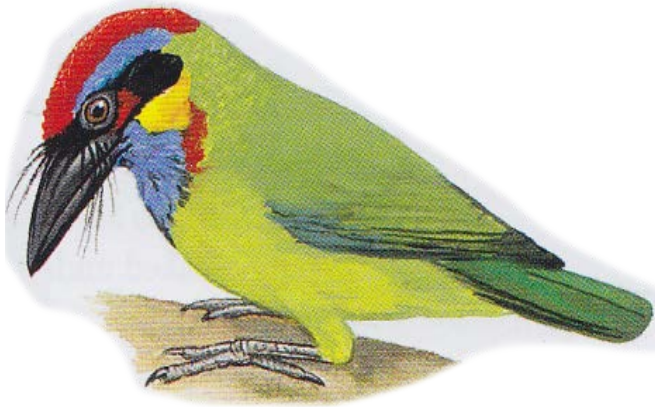
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**TAKUR**



PRICE: 55 RIBU

SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CANNOT LEARN SINGING

CARD II

**CICA BIRU**



PRICE: 132 RIBU

ABUNDANT IN SUMATRA

WILD

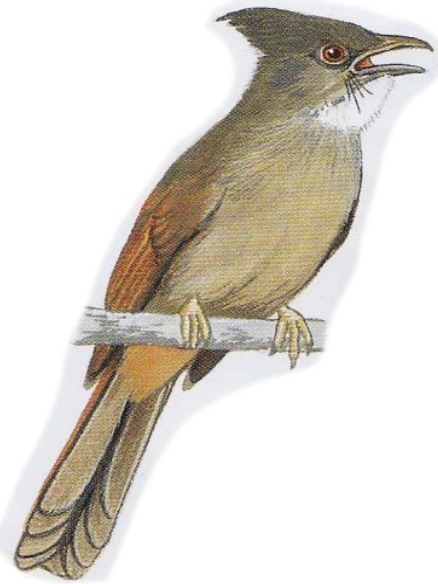
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**KAPAS TEMBAK**



PRICE: 475 RIBU

SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**TENGKEK BUTO**



PRICE: 600 RIBU

ABUNDANT IN SUMATRA

WILD

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

CICA BIRU



PRICE: 132 RIBU

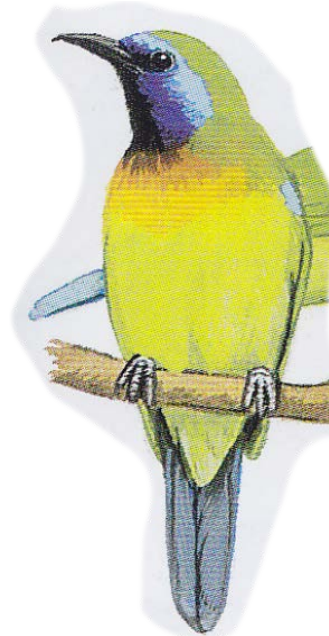
ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

CICA RANTING EMAS



PRICE: 213 RIBU

SCARCE IN SUMATRA

BRED

CAN LEARN SINGING

CARD III

NEITHER BIRD I NOR II

CARD I

**JALAK HITAM / KERBAU**



PRICE: 54 RIBU  
SCARCE IN SUMATRA  
WILD  
CANNOT LEARN SINGING

CARD II

**KAPAS TEMBAK**



PRICE: 285 RIBU  
SCARCE IN SUMATRA  
BRED  
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**PUNAI TANAH / LIMBUK**



PRICE: 25 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CANNOT LEARN SINGING

CARD II

**JALAK HITAM / KERBAU**



PRICE: 75 RIBU

SCARCE IN SUMATRA

BRED

CANNOT LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**TELEDEKAN**



PRICE: 200 RIBU

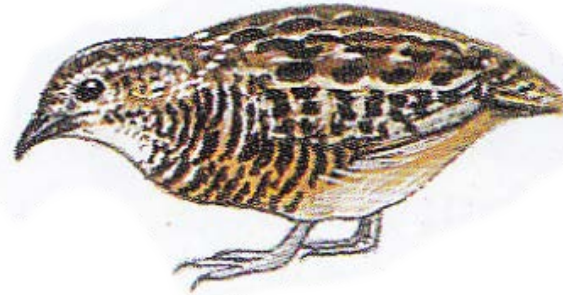
SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**PUYUH**



PRICE: 36 RIBU

SCARCE IN SUMATRA

BRED

CANNOT LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**



CARD I

**JALAK HITAM / KERBAU**



PRICE: 66 RIBU  
SCARCE IN SUMATRA  
BRED  
CANNOT LEARN SINGING

CARD II

**KOLIBRI FERRARI**



PRICE: 50 RIBU  
ABUNDANT IN SUMATRA  
WILD  
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**



**CARD I**

**KOLIBRI FERRARI**



PRICE: 45 RIBU  
ABUNDANT IN SUMATRA  
WILD  
CAN LEARN SINGING

**CARD II**

**KACER**



PRICE: 500 RIBU  
ABUNDANT IN SUMATRA  
NO INFORMATION ON WILD / BRED  
CAN LEARN SINGING

**CARD III**

**NEITHER BIRD I NOR II**

CARD I

**KOLIBRI FERRARI**



PRICE: 63 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**KAPAS TEMBAK**



PRICE: 285 RIBU

SCARCE IN SUMATRA

WILD

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

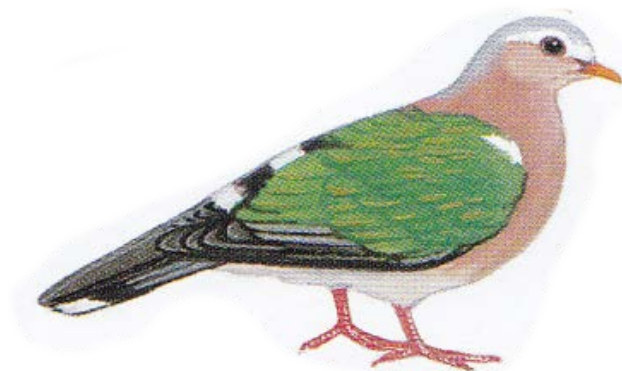
**TELEDEKAN**



PRICE: 220 RIBU  
SCARCE IN SUMATRA  
BRED  
CAN LEARN SINGING

CARD II

**PUNAI TANAH / LIMBUK**



PRICE: 21 RIBU  
ABUNDANT IN SUMATRA  
NO INFORMATION ON WILD / BRED  
CANNOT LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**KEPODANG**



PRICE: 180 RIBU

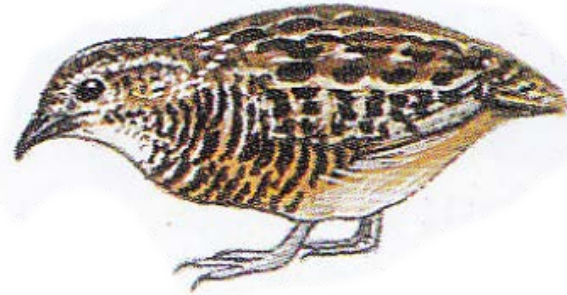
ABUNDANT IN SUMATRA

WILD

CAN LEARN SINGING

CARD II

**PUYUH**



PRICE: 40 RIBU

SCARCE IN SUMATRA

BRED

CANNOT LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**TELEDEKAN**



PRICE: 150 RIBU  
SCARCE IN SUMATRA  
WILD  
CAN LEARN SINGING

CARD II

**KEPODANG**



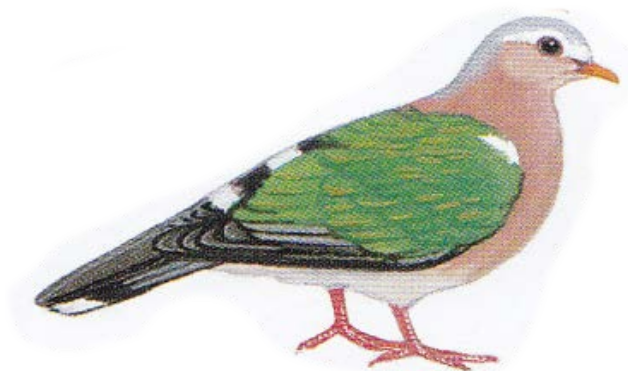
PRICE: 200 RIBU  
ABUNDANT IN SUMATRA  
BRED  
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**PUNAI TANAH / LIMBUK**



PRICE: 35 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CANNOT LEARN SINGING

CARD II

**KAPAS TEMBAK**



PRICE: 380 RIBU

SCARCE IN SUMATRA

WILD

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**JALAK HITAM / KERBAU**



PRICE: 54 RIBU  
SCARCE IN SUMATRA  
WILD  
CANNOT LEARN SINGING

CARD II

**KEPODANG**



PRICE: 220 RIBU  
ABUNDANT IN SUMATRA  
NO INFORMATION ON WILD / BRED  
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**JALAK HITAM / KERBAU**



PRICE: 45 RIBU  
SCARCE IN SUMATRA  
WILD  
CANNOT LEARN SINGING

CARD II

**KACER**



PRICE: 360 RIBU  
ABUNDANT IN SUMATRA  
BRED  
CAN LEARN SINGING

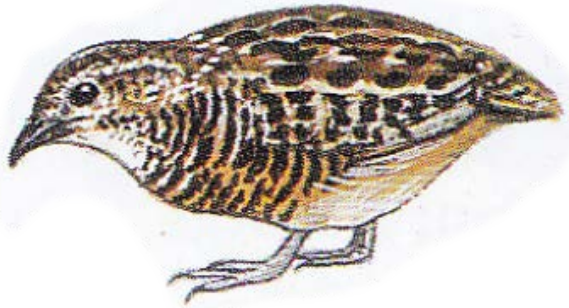
CARD III

**NEITHER BIRD I NOR II**



CARD I

**PUYUH**



PRICE: 44 RIBU

SCARCE IN SUMATRA

WILD

CANNOT LEARN SINGING

CARD II

**KAPAS TEMBAK**



PRICE: 342 RIBU

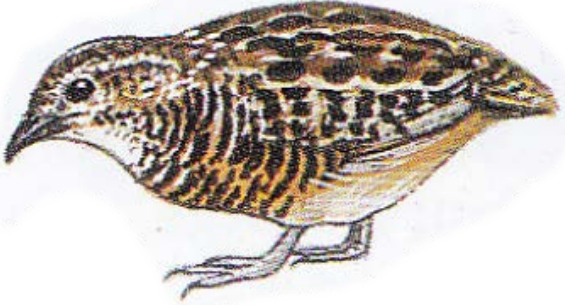
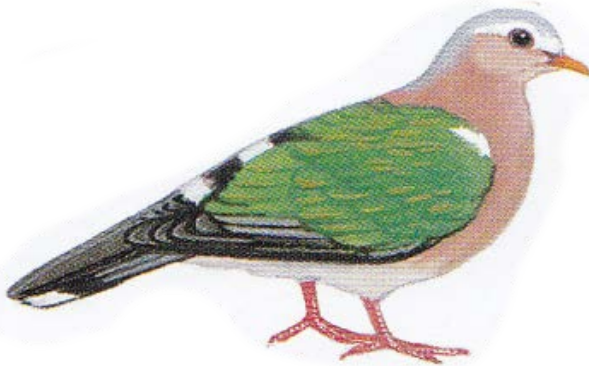
SCARCE IN SUMATRA



BRED

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I	CARD II	CARD III
<p><b>PUYUH</b></p>  <p>PRICE: 36 RIBU</p> <p>SCARCE IN SUMATRA</p> <p>NO INFORMATION ON WILD / BRED</p> <p>CANNOT LEARN SINGING</p>	<p><b>PUNAI TANAH / LIMBUK</b></p>  <p>PRICE: 31 RIBU</p> <p>ABUNDANT IN SUMATRA</p> <p>WILD</p> <p>CANNOT LEARN SINGING</p>	<p><b>NEITHER BIRD I NOR II</b></p>

CARD I	CARD II	CARD III
<p><b>KAPAS TEMBAK</b></p>  <p>PRICE: 418 RIBU</p> <p>SCARCE IN SUMATRA</p> <p>NO INFORMATION ON WILD / BRED</p> <p>CAN LEARN SINGING</p>	<p><b>KACER</b></p>  <p>PRICE: 300 RIBU</p> <p>ABUNDANT IN SUMATRA</p> <p>BRED</p> <p>CAN LEARN SINGING</p>	<p><b>NEITHER BIRD I NOR II</b></p>

CARD I

**KOLIBRI FERRARI**



PRICE: 38 RIBU

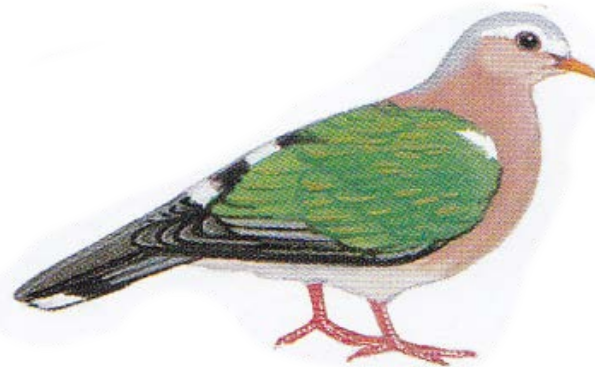
ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**PUNAI TANAH / LIMBUK**



PRICE: 28 RIBU

ABUNDANT IN SUMATRA

BRED

CANNOT LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**TELEDEKAN**



PRICE: 180 RIBU

SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**KOLIBRI FERRARI**



PRICE: 63 RIBU

ABUNDANT IN SUMATRA

BRED

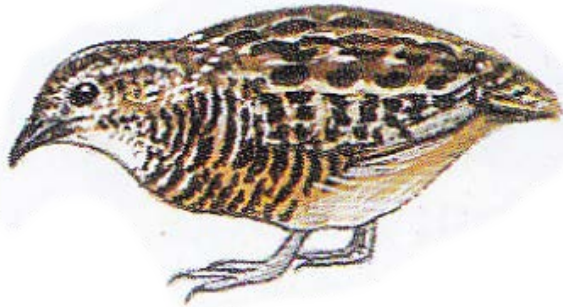
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**PUYUH**



PRICE: 50 RIBU  
SCARCE IN SUMATRA  
WILD  
CANNOT LEARN SINGING

CARD II

**JALAK HITAM / KERBAU**



PRICE: 60 RIBU  
SCARCE IN SUMATRA  
NO INFORMATION ON WILD / BRED  
CANNOT LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**KEPODANG**



PRICE: 150 RIBU

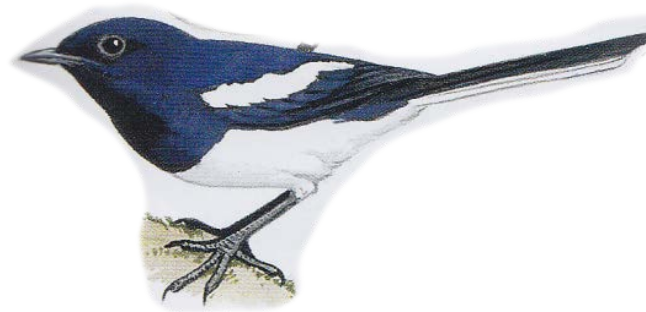
ABUNDANT IN SUMATRA

BRED

CAN LEARN SINGING

CARD II

**KACER**



PRICE: 400 RIBU

ABUNDANT IN SUMATRA

WILD

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**



CARD I

**TELEDEKAN**



PRICE: 150 RIBU  
SCARCE IN SUMATRA  
BRED  
CAN LEARN SINGING

CARD II

**KAPAS TEMBAK**



PRICE: 475 RIBU  
SCARCE IN SUMATRA  
WILD  
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**KEPODANG**



PRICE: 250 RIBU

ABUNDANT IN SUMATRA

WILD

CAN LEARN SINGING

CARD II

**KOLIBRI FERRARI**



PRICE: 55 RIBU

ABUNDANT IN SUMATRA

BRED

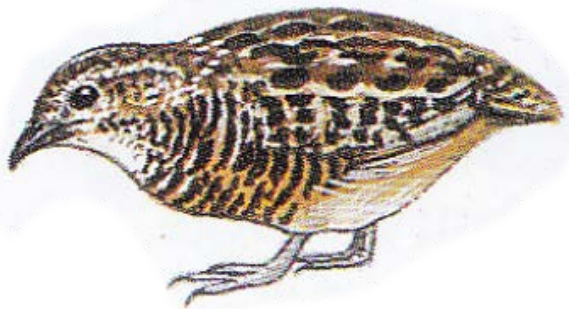
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**PUYUH**



PRICE: 40 RIBU

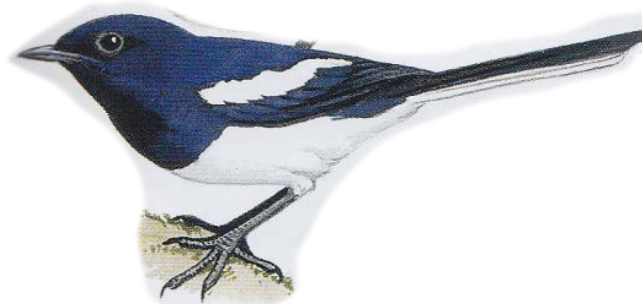
SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CANNOT LEARN SINGING

CARD II

**KACER**



PRICE: 440 RIBU

ABUNDANT IN SUMATRA

WILD

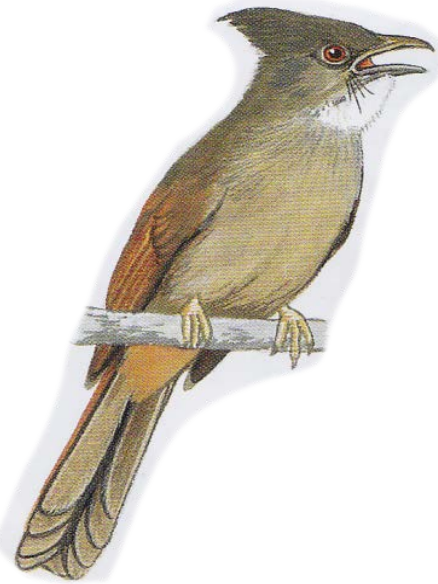
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**KAPAS TEMBAK**



PRICE: 475 RIBU

SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**KEPODANG**



PRICE: 200 RIBU

ABUNDANT IN SUMATRA

WILD

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

**CARD I**

**KACER**



PRICE: 440 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

**CARD II**

**TELEDEKAN**



PRICE: 250 RIBU

SCARCE IN SUMATRA

BRED

CAN LEARN SINGING

**CARD III**

**NEITHER BIRD I NOR II**

**CARD I**

**MANYAR**



PRICE: 23 RIBU

SCARCE IN SUMATRA

WILD

CANNOT LEARN SINGING

**CARD II**

**CICA KELING**



PRICE: 225 RIBU

SCARCE IN SUMATRA

BRED

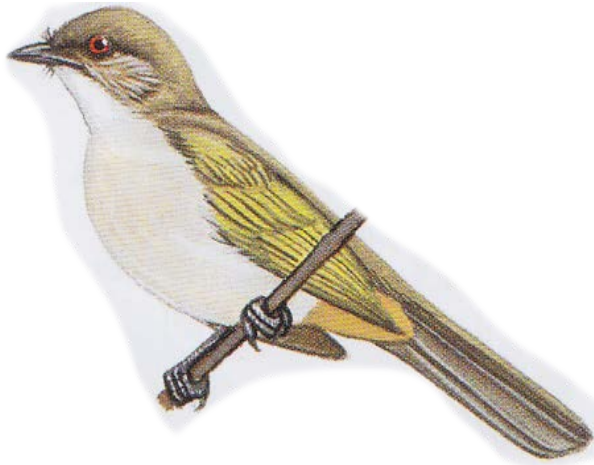
CANNOT LEARN SINGING

**CARD III**

**NEITHER BIRD I NOR II**

**CARD I**

**BERBAH HUTAN**



PRICE: 36 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

**CARD II**

**MANYAR**



PRICE: 31 RIBU

SCARCE IN SUMATRA

BRED

CANNOT LEARN SINGING

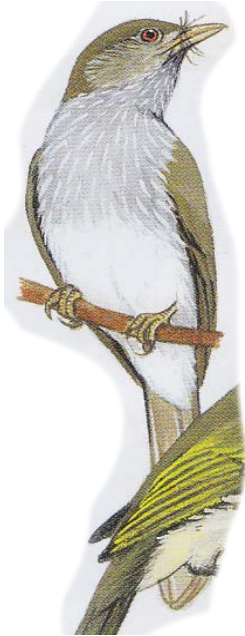
**CARD III**

**NEITHER BIRD I NOR II**



CARD I

**SIRI-SIRI BESAR**



PRICE: 400 RIBU

SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**PUNAI**



PRICE: 27 RIBU

SCARCE IN SUMATRA

BRED

CANNOT LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

**CARD I**

**MANYAR**



PRICE: 28 RIBU

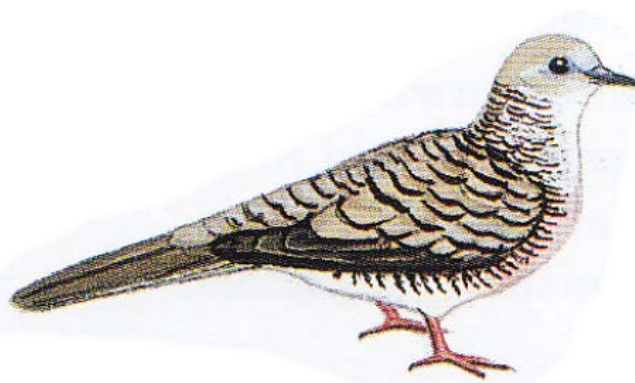
SCARCE IN SUMATRA

BRED

CANNOT LEARN SINGING

**CARD II**

**PERKUTUT**



PRICE: 50 RIBU

ABUNDANT IN SUMATRA

WILD

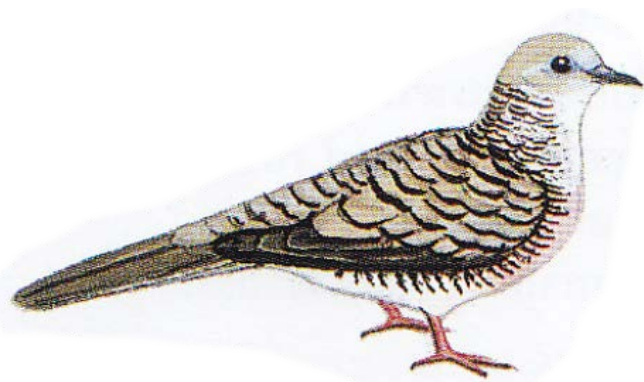
CANNOT LEARN SINGING

**CARD III**

**NEITHER BIRD I NOR II**

CARD I

**PERKUTUT**



PRICE: 45 RIBU  
ABUNDANT IN SUMATRA  
WILD  
CANNOT LEARN SINGING

CARD II

**CICA LILIN**



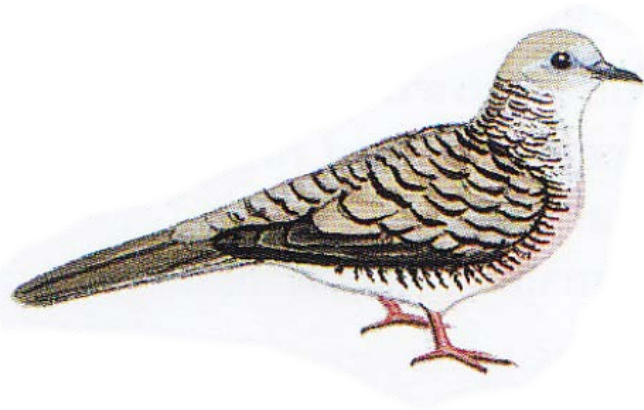
PRICE: 1125 RIBU  
ABUNDANT IN SUMATRA  
NO INFORMATION ON WILD / BRED  
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**PERKUTUT**



PRICE: 63 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CANNOT LEARN SINGING

CARD II

**CICA KELING**



PRICE: 225 RIBU

SCARCE IN SUMATRA

WILD

CANNOT LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

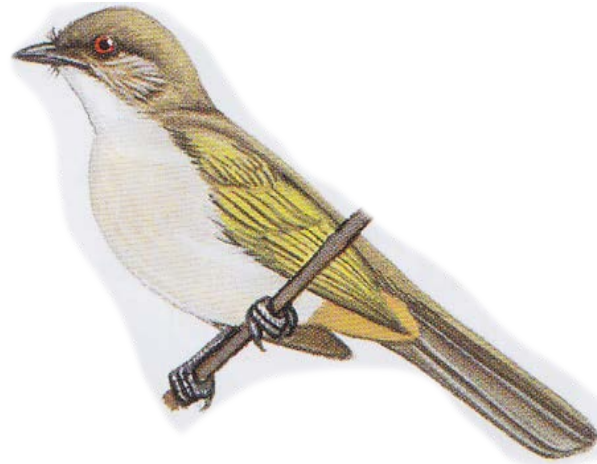
**SIRI-SIRI BESAR**



PRICE: 440 RIBU  
SCARCE IN SUMATRA  
BRED  
CAN LEARN SINGING

CARD II

**BERBAH HUTAN**



PRICE: 30 RIBU  
ABUNDANT IN SUMATRA  
NO INFORMATION ON WILD / BRED  
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

**CARD I**

**TIUNG / BEO**



PRICE: 477 RIBU  
ABUNDANT IN SUMATRA  
WILD  
CAN LEARN SINGING

**CARD II**

**PUNAI**



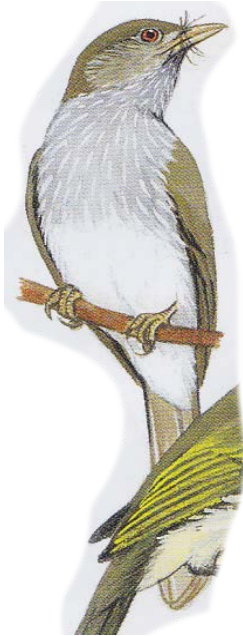
PRICE: 30 RIBU  
SCARCE IN SUMATRA  
BRED  
CANNOT LEARN SINGING

**CARD III**

**NEITHER BIRD I NOR II**

**CARD I**

**SIRI-SIRI BESAR**



PRICE: 300 RIBU  
SCARCE IN SUMATRA  
WILD  
CAN LEARN SINGING

**CARD II**

**TIUNG / BEO**



PRICE: 530 RIBU  
ABUNDANT IN SUMATRA  
BRED  
CAN LEARN SINGING

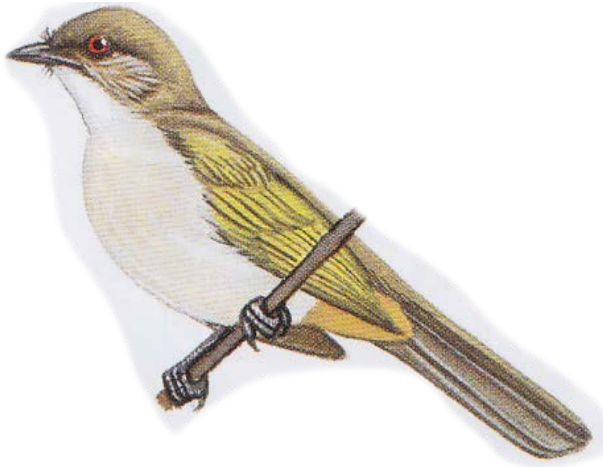
**CARD III**

**NEITHER BIRD I NOR II**



**CARD I**

**BERBAH HUTAN**



PRICE: 50 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

**CARD II**

**CICA KELING**



PRICE: 300 RIBU

SCARCE IN SUMATRA

WILD

CANNOT LEARN SINGING

**CARD III**

**NEITHER BIRD I NOR II**

CARD I

**MANYAR**



PRICE: 23 RIBU

SCARCE IN SUMATRA

WILD

CANNOT LEARN SINGING

CARD II

**TIUNG / BEO**



PRICE: 583 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**MANYAR**



PRICE: 19 RIBU

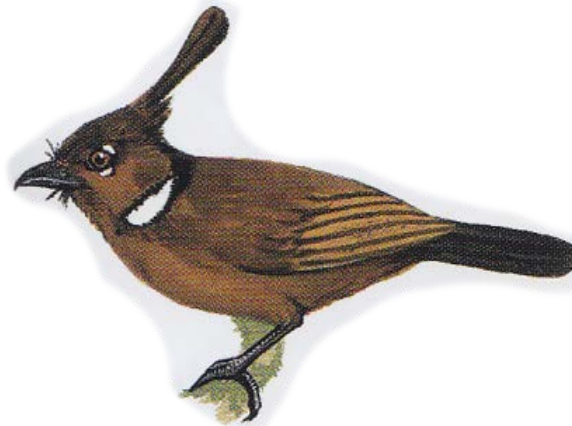
SCARCE IN SUMATRA

WILD

CANNOT LEARN SINGING

CARD II

**CICA LILIN**



PRICE: 810 RIBU

ABUNDANT IN SUMATRA

BRED

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

**CARD I**

**PUNAI**



PRICE: 33 RIBU  
SCARCE IN SUMATRA  
WILD  
CANNOT LEARN SINGING

**CARD II**

**CICA KELING**



PRICE: 270 RIBU  
SCARCE IN SUMATRA  
BRED  
CANNOT LEARN SINGING

**CARD III**

**NEITHER BIRD I NOR II**

**CARD I**

**PUNAI**



PRICE: 27 RIBU

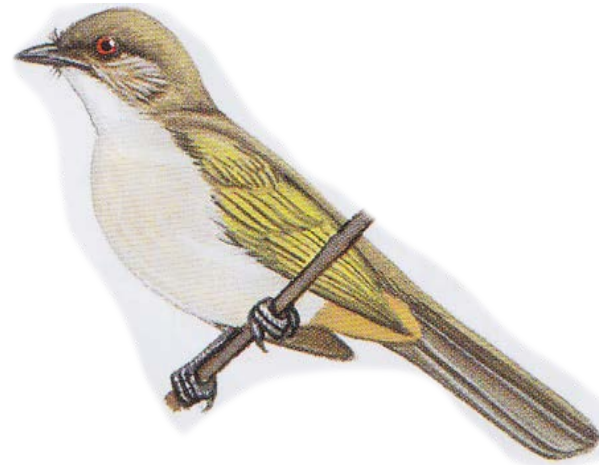
SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CANNOT LEARN SINGING

**CARD II**

**BERBAH HUTAN**



PRICE: 44 RIBU

ABUNDANT IN SUMATRA

WILD

CAN LEARN SINGING

**CARD III**

**NEITHER BIRD I NOR II**

CARD I

**CICA KELING**



PRICE: 330 RIBU

SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CANNOT LEARN SINGING

CARD II

**CICA LILIN**



PRICE: 675 RIBU

ABUNDANT IN SUMATRA

BRED

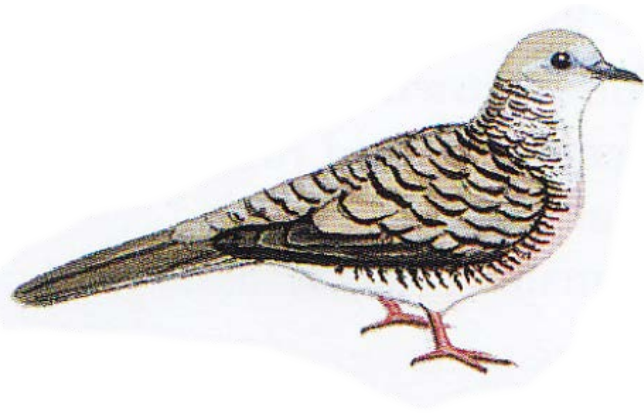
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**PERKUTUT**



PRICE: 38 RIBU

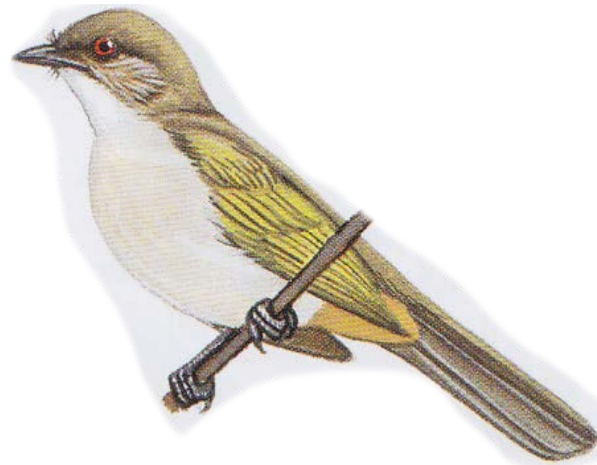
ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CANNOT LEARN SINGING

CARD II

**BERBAH HUTAN**



PRICE: 40 RIBU

ABUNDANT IN SUMATRA

BRED

CAN LEARN SINGING

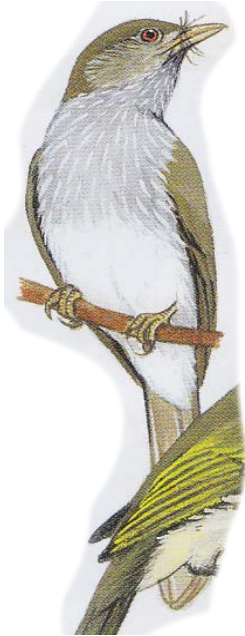
CARD III

**NEITHER BIRD I NOR II**



CARD I

**SIRI-SIRI BESAR**



PRICE: 360 RIBU

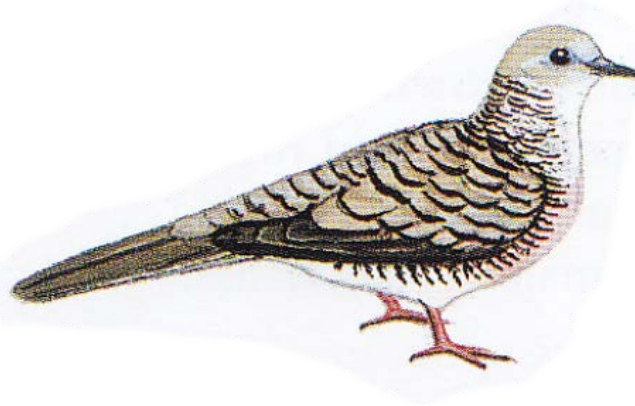
SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**PERKUTUT**



PRICE: 63 RIBU

ABUNDANT IN SUMATRA

BRED

CANNOT LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

**CARD I**

**PUNAI**



PRICE: 38 RIBU

SCARCE IN SUMATRA

WILD

CANNOT LEARN SINGING

**CARD II**

**MANYAR**



PRICE: 25 RIBU

SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CANNOT LEARN SINGING

**CARD III**

**NEITHER BIRD I NOR II**

CARD I

TIUNG / BEO



PRICE: 398 RIBU

ABUNDANT IN SUMATRA

BRED

CAN LEARN SINGING

CARD II

CICA LILIN



PRICE: 900 RIBU

ABUNDANT IN SUMATRA

WILD

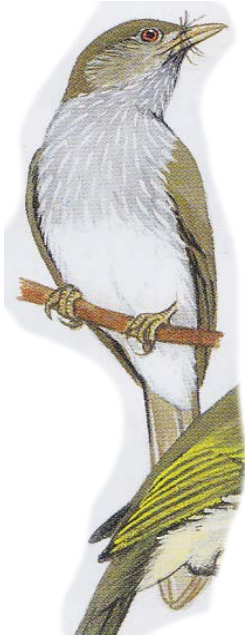
CAN LEARN SINGING

CARD III

NEITHER BIRD I NOR II

**CARD I**

**SIRI-SIRI BESAR**



PRICE: 300 RIBU  
SCARCE IN SUMATRA  
BRED  
CAN LEARN SINGING

**CARD II**

**CICA KELING**



PRICE: 375 RIBU  
SCARCE IN SUMATRA  
WILD  
CANNOT LEARN SINGING

**CARD III**

**NEITHER BIRD I NOR II**

CARD I

**TIUNG / BEO**



PRICE: 663 RIBU

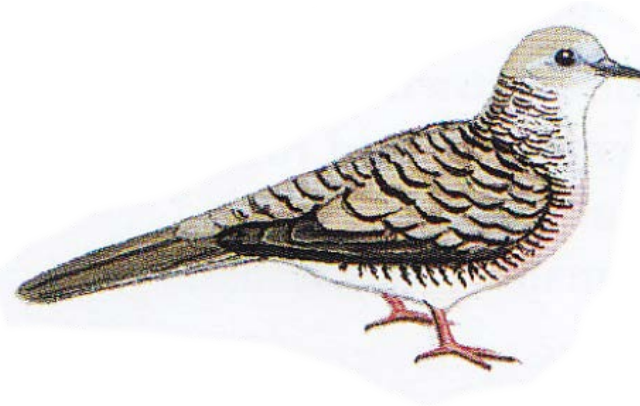
ABUNDANT IN SUMATRA

WILD

CAN LEARN SINGING

CARD II

**PERKUTUT**



PRICE: 55 RIBU

ABUNDANT IN SUMATRA

BRED

CANNOT LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

PUNAI



PRICE: 30 RIBU

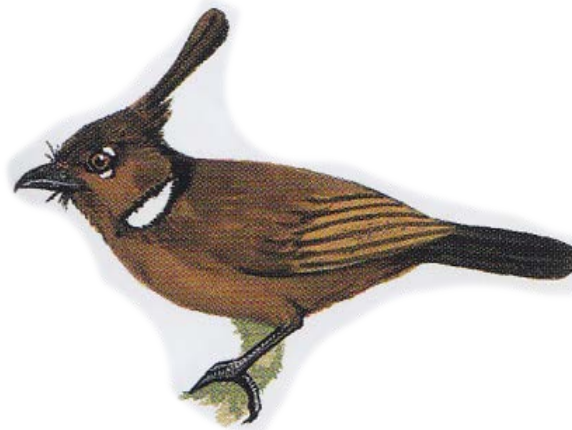
SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CANNOT LEARN SINGING

CARD II

CICA LILIN



PRICE: 990 RIBU

ABUNDANT IN SUMATRA

WILD

CAN LEARN SINGING

CARD III

NEITHER BIRD I NOR II

CARD I

**CICA KELING**



PRICE: 375 RIBU

SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CANNOT LEARN SINGING

CARD II

**TIUNG / BEO**



PRICE: 530 RIBU

ABUNDANT IN SUMATRA

WILD

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**



**CARD I**

**CICA LILIN**



PRICE: 990 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

**CARD II**

**SIRI-SIRI BESAR**



PRICE: 500 RIBU

SCARCE IN SUMATRA

BRED

CAN LEARN SINGING

**CARD III**

**NEITHER BIRD I NOR II**

CARD I

**JALAK HITAM / KERBAU**



PRICE: 54 RIBU  
SCARCE IN SUMATRA  
WILD  
CANNOT LEARN SINGING

CARD II

**CICA HIJAU**



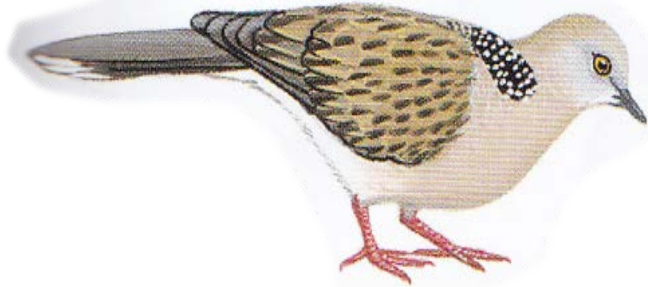
PRICE: 338 RIBU  
SCARCE IN SUMATRA  
BRED  
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**BALAM HUTAN**



PRICE: 32 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**JALAK HITAM / KERBAU**



PRICE: 75 RIBU

SCARCE IN SUMATRA

BRED

CANNOT LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**PANCA WARNA**



PRICE: 350 RIBU

SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**CICA WILIS / LARAK TINTIN**



PRICE: 50 RIBU

SCARCE IN SUMATRA

BRED

CANNOT LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**JALAK HITAM / KERBAU**



PRICE: 66 RIBU  
SCARCE IN SUMATRA  
BRED  
CANNOT LEARN SINGING

CARD II

**KUTILANG**



PRICE: 27 RIBU  
ABUNDANT IN SUMATRA  
WILD  
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

**CARD I**

**KUTILANG**



PRICE: 24 RIBU

ABUNDANT IN SUMATRA

WILD

CAN LEARN SINGING

**CARD II**

**CICA HIJAU MINI**



PRICE: 188 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

**CARD III**

**NEITHER BIRD I NOR II**

CARD I

**KUTILANG**



PRICE: 34 RIBU

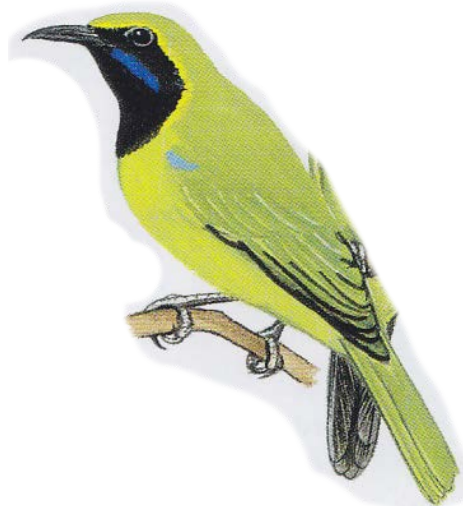
ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**CICA HIJAU**



PRICE: 338 RIBU

SCARCE IN SUMATRA

WILD

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**



CARD I

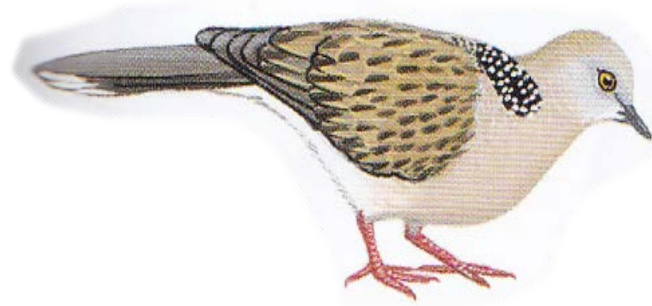
**PANCA WARNA**



PRICE: 385 RIBU  
SCARCE IN SUMATRA  
BRED  
CAN LEARN SINGING

CARD II

**BALAM HUTAN**



PRICE: 26 RIBU  
ABUNDANT IN SUMATRA  
NO INFORMATION ON WILD / BRED  
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**SRIGUNTING / SAWE**



PRICE: 270 RIBU

ABUNDANT IN SUMATRA

WILD

CAN LEARN SINGING

CARD II

**CICA WILIS / LARAK TINTIN**



PRICE: 55 RIBU

SCARCE IN SUMATRA

BRED

CANNOT LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**PANCA WARNA**



PRICE: 263 RIBU  
SCARCE IN SUMATRA  
WILD  
CAN LEARN SINGING

CARD II

**SRIGUNTING / SAWE**



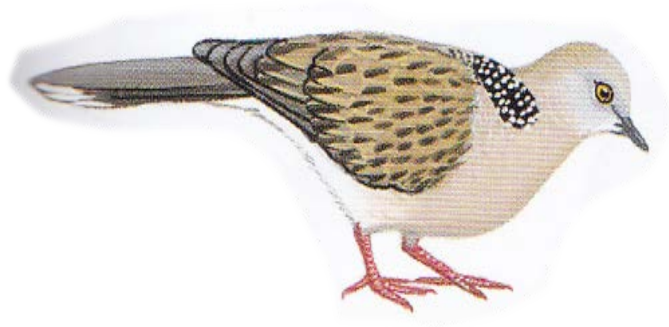
PRICE: 300 RIBU  
ABUNDANT IN SUMATRA  
BRED  
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**BALAM HUTAN**



PRICE: 44 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**CICA HIJAU**



PRICE: 450 RIBU

SCARCE IN SUMATRA

WILD

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**JALAK HITAM / KERBAU**



PRICE: 54 RIBU

SCARCE IN SUMATRA

WILD

CANNOT LEARN SINGING

CARD II

**SRIGUNTING / SAWE**



PRICE: 330 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**JALAK HITAM / KERBAU**



PRICE: 45 RIBU

SCARCE IN SUMATRA

WILD

CANNOT LEARN SINGING

CARD II

**CICA HIJAU MINI**



PRICE: 135 RIBU

ABUNDANT IN SUMATRA

BRED

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**CICA WILIS / LARAK TINTIN**



PRICE: 61 RIBU  
SCARCE IN SUMATRA  
WILD  
CANNOT LEARN SINGING

CARD II

**CICA HIJAU**



PRICE: 405 RIBU  
SCARCE IN SUMATRA  
BRED  
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**



CARD I

**CICA WILIS / LARAK TINTIN**



PRICE: 50 RIBU

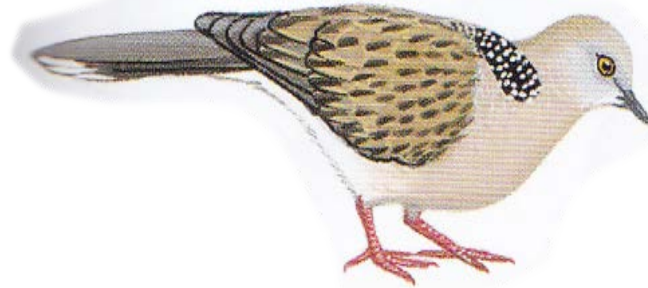
SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CANNOT LEARN SINGING

CARD II

**BALAM HUTAN**



PRICE: 39 RIBU

ABUNDANT IN SUMATRA

WILD

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**CICA HIJAU**



PRICE: 495 RIBU

SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**CICA HIJAU MINI**



PRICE: 113 RIBU

ABUNDANT IN SUMATRA

BRED

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**KUTILANG**



PRICE: 20 RIBU

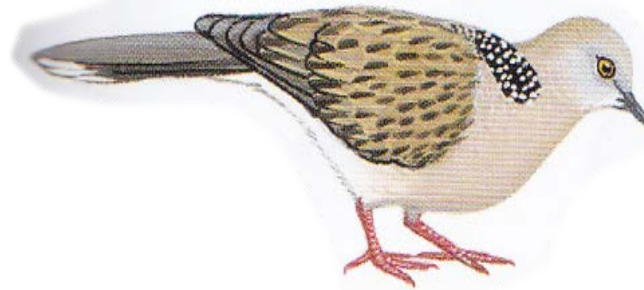
ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**BALAM HUTAN**



PRICE: 35 RIBU

ABUNDANT IN SUMATRA

BRED

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**PANCA WARNA**



PRICE: 315 RIBU

SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

CARD II

**KUTILANG**



PRICE: 34 RIBU

ABUNDANT IN SUMATRA

BRED

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**CICA WILIS / LARAK TINTIN**



PRICE: 69 RIBU  
SCARCE IN SUMATRA  
WILD  
CANNOT LEARN SINGING

CARD II

**JALAK HITAM / KERBAU**



PRICE: 60 RIBU  
SCARCE IN SUMATRA  
NO INFORMATION ON WILD / BRED  
CANNOT LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

**CARD I**

**SRIGUNTING / SAWE**



PRICE: 225 RIBU  
ABUNDANT IN SUMATRA  
BRED  
CAN LEARN SINGING

**CARD II**

**CICA HIJAU MINI**



PRICE: 150 RIBU  
ABUNDANT IN SUMATRA  
WILD  
CAN LEARN SINGING

**CARD III**

**NEITHER BIRD I NOR II**

CARD I

PANCA WARNA



PRICE: 263 RIBU  
SCARCE IN SUMATRA  
BRED  
CAN LEARN SINGING

CARD II

CICA HIJAU



PRICE: 563 RIBU  
SCARCE IN SUMATRA  
WILD  
CAN LEARN SINGING

CARD III

NEITHER BIRD I NOR II



CARD I

**SRIGUNTING / SAWE**



PRICE: 375 RIBU  
ABUNDANT IN SUMATRA  
WILD  
CAN LEARN SINGING

CARD II

**KUTILANG**



PRICE: 30 RIBU  
ABUNDANT IN SUMATRA  
BRED  
CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

CARD I

**CICA WILIS / LARAK TINTIN**



PRICE: 55 RIBU

SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CANNOT LEARN SINGING

CARD II

**CICA HIJAU MINI**



PRICE: 165 RIBU

ABUNDANT IN SUMATRA

WILD

CAN LEARN SINGING

CARD III

**NEITHER BIRD I NOR II**

**CARD I**

**CICA HIJAU**



PRICE: 563 RIBU

SCARCE IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

**CARD II**

**SRIGUNTING / SAWE**



PRICE: 300 RIBU

ABUNDANT IN SUMATRA

WILD

CAN LEARN SINGING

**CARD III**

**NEITHER BIRD I NOR II**

**CARD I**

**CICA HIJAU MINI**



PRICE: 165 RIBU

ABUNDANT IN SUMATRA

NO INFORMATION ON WILD / BRED

CAN LEARN SINGING

**CARD II**

**PANCA WARNA**



PRICE: 438 RIBU

SCARCE IN SUMATRA

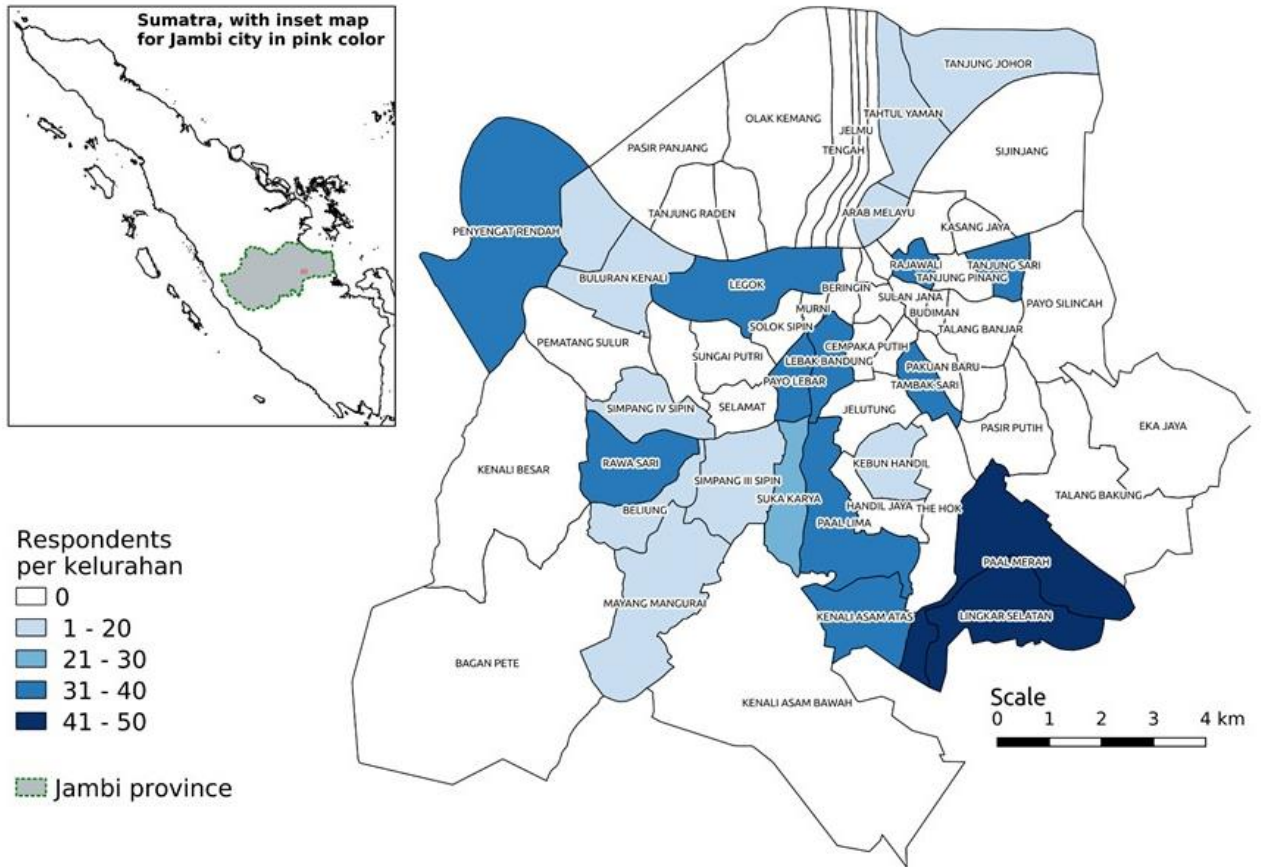
BRED

CAN LEARN SINGING

**CARD III**

**NEITHER BIRD I NOR II**

**Appendix A4.** Map of the study area



**Appendix A5.** Determinants of consumer preference for bird attributes by socio-demographic categories

**(a) Non-random respondent-specific determinants of bird choice**

<b>Variable</b>	<b>Description</b>	<b>Mean function</b>	<b>Std. Dev. function</b>
Familiarity	Binary variable. 1 if the bird species was familiar for the respondent; 0 otherwise (mean = 0.69)	0.745 <sup>***</sup> (0.252)	1.728 <sup>***</sup> (0.305)
Augmented rarity perception	Binary variable. 1 if the respondent's perception on rarity status of the species matched with the rarity status in the choice cards; 0 otherwise (mean = 0.31)	0.222 (0.205)	0.305 (0.510)
Negated rarity perception	Binary variable. 1 if the respondent's perception on rarity status of the species did not match with the rarity status in the choice cards; 0 otherwise (mean = 0.28)	0.089 (0.206)	0.886 <sup>***</sup> (0.278)
Kept by others	Binary variable. 1 if the bird species was kept by friends, relatives or neighbors of the respondent; 0 otherwise (mean = 0.40)	0.726 <sup>***</sup> (0.187)	1.184 <sup>***</sup> (0.314)

Notes: These variables form part of Model 3 (Table 3). \*\*\* :  $p \leq 0.01$ .

(b) Differential preference of respondents: By wealth quantile

	Wealth quantiles			
	Poorest (q1)	q2	q3	Wealthiest (q4)
<b>Mean function</b>				
Bird Price	0.003 <sup>***</sup> (0.001)	0.005 <sup>***</sup> (0.001)	0.009 <sup>***</sup> (0.002)	0.009 <sup>***</sup> (0.002)
Square of Bird Price	-3.E-06 <sup>***</sup> (1.E-06)	-4.E-06 <sup>***</sup> (1.E-06)	-8.E-06 <sup>***</sup> (2.E-06)	-8.E-06 <sup>***</sup> (2.E-06)
Rare dummy	0.470 <sup>**</sup> (0.197)	0.302 (0.197)	0.143 (0.240)	0.349 <sup>*</sup> (0.200)
Trade dummy	1.294 <sup>***</sup> (0.304)	1.401 <sup>***</sup> (0.266)	1.233 <sup>***</sup> (0.357)	1.254 <sup>***</sup> (0.314)
Captured from the wild	-0.198 (0.162)	-0.004 (0.164)	-0.276 (0.183)	-0.072 (0.194)
Bred in captivity	-0.043 (0.176)	0.110 (0.184)	-0.230 (0.231)	0.065 (0.187)
Singing	1.837 <sup>***</sup> (0.371)	1.613 <sup>***</sup> (0.343)	1.476 <sup>***</sup> (0.433)	1.202 <sup>***</sup> (0.368)
Familiarity	0.557 <sup>*</sup> (0.330)	1.170 <sup>***</sup> (0.375)	0.512 (0.407)	1.643 <sup>***</sup> (0.634)
Kept by others	0.896 <sup>**</sup> (0.370)	0.382 (0.257)	0.786 <sup>**</sup> (0.382)	0.471 (0.307)
<b>Std. dev. function</b>				
Rare dummy	0.395 (0.475)	0.413 (0.426)	0.761 (0.395)	-0.064 (0.517)
Trade dummy	1.712 <sup>***</sup> (0.382)	0.930 <sup>***</sup> (0.345)	1.836 (0.451)	1.579 <sup>***</sup> (0.437)
Captured from the wild	0.031 (0.315)	0.003 (0.238)	0.006 (0.287)	0.835 <sup>***</sup> (0.302)
Bred in captivity	0.426 (0.411)	0.717 <sup>***</sup> (0.284)	1.025 (0.357)	-0.347 (0.460)
Singing	1.055 <sup>**</sup> (0.465)	1.188 <sup>***</sup> (0.382)	1.504 (0.511)	0.971 <sup>**</sup> (0.492)
Familiarity	1.182 <sup>**</sup> (0.541)	1.527 <sup>***</sup> (0.472)	1.698 (0.540)	3.415 <sup>***</sup> (0.832)
Kept by others	1.628 <sup>***</sup> (0.521)	0.264 (0.650)	1.416 (0.617)	0.277 (0.915)
Number of observations	1,484	1,374	1,438	1,516
Log likelihood	-387.95	-340.68	-346.55	-354.95
LR Chi <sup>2</sup>	46.64 <sup>***</sup>	19.33 <sup>***</sup>	47.36 <sup>***</sup>	64.49 <sup>***</sup>

Notes: Household's wealth index was constructed using a principal component analysis (PCA) on the number of 8 durable assets owned by the household (color television, motorbike, four wheeler, refrigerator, washing machine, smart phone, and personal computer), and number of rooms in the apartment and the floor material. Kaiser-Meyer-Olkin measure of sampling adequacy statistic associated with PCA estimation is 0.84, which can be considered as 'meritorious' (Kaiser 1974).

\*\*\* : p ≤ 0.01; \*\* : p ≤ 0.05; \* : p ≤ 0.10. Reference: Kaiser HF (1974) An Index of Factor Simplicity. *Psychometrika* 39: 31–36.



(c) Differential preference of respondents: By education, age, and marital status

	Education		Age		Marital status	
	Less educated (<10 years in school)	More educated (≥10 years in school)	Younger respondents (<42 years)	Older respondents (≥42 years)	Unmarried	Married
<b>Mean function</b>						
Bird Price	0.005 <sup>***</sup> (0.001)	0.006 <sup>***</sup> (0.001)	0.006 <sup>***</sup> (0.001)	0.006 <sup>***</sup> (0.001)	0.004 <sup>***</sup> (0.002)	0.006 <sup>***</sup> (0.001)
Square of Bird Price	-5.E-06 <sup>***</sup> (1.E-06)	-6.E-06 <sup>***</sup> (7.E-07)	-6.E-06 <sup>***</sup> (1.E-06)	-6.E-06 <sup>***</sup> (9.E-07)	-3.E-06 (2.E-06)	-6.E-06 <sup>***</sup> (8.E-07)
Rare dummy	0.226 (0.172)	0.297 <sup>***</sup> (0.098)	0.424 <sup>***</sup> (0.143)	0.205 (0.137)	0.806 <sup>***</sup> (0.280)	0.250 <sup>**</sup> (0.108)
Trade dummy	1.300 <sup>***</sup> (0.241)	1.224 <sup>***</sup> (0.145)	1.631 <sup>***</sup> (0.230)	0.874 <sup>***</sup> (0.184)	1.130 <sup>***</sup> (0.318)	1.260 <sup>***</sup> (0.162)
Captured from the wild	-0.090 (0.133)	-0.133 (0.083)	-0.059 (0.125)	-0.181 <sup>*</sup> (0.110)	-0.118 (0.226)	-0.144 (0.089)
Bred in captivity	0.106 (0.164)	-0.054 (0.092)	0.011 (0.137)	-0.042 (0.123)	0.131 (0.250)	-0.058 (0.099)
Singing	1.441 <sup>***</sup> (0.287)	1.442 <sup>***</sup> (0.172)	1.927 <sup>***</sup> (0.298)	1.115 <sup>***</sup> (0.211)	2.167 <sup>***</sup> (0.526)	1.364 <sup>***</sup> (0.188)
Familiarity	0.719 <sup>**</sup> (0.289)	0.825 <sup>***</sup> (0.196)	0.991 <sup>***</sup> (0.367)	0.753 <sup>***</sup> (0.218)	1.231 <sup>**</sup> (0.637)	0.823 <sup>***</sup> (0.208)
Kept by others	0.700 <sup>**</sup> (0.308)	0.648 <sup>***</sup> (0.174)	0.601 <sup>**</sup> (0.269)	0.541 <sup>***</sup> (0.220)	0.619 <sup>*</sup> (0.367)	0.610 <sup>***</sup> (0.187)

Notes: \*\*\*: p ≤ 0.01; \*\*: p ≤ 0.05; \*: p ≤ 0.10.

(contd.)

	Education		Age		Marital status	
	Less educated (<10 years in school)	More educated (≥10 years in school)	Younger respondents (<42 years)	Older respondents (≥42 years)	Unmarried	Married
<b>Std. dev. function</b>						
Rare dummy	0.815 <sup>***</sup> (0.277)	0.394 (0.263)	0.176 (0.472)	0.589 <sup>**</sup> (0.242)	0.028 (0.366)	-0.548 <sup>***</sup> (0.212)
Trade dummy	1.562 <sup>***</sup> (0.290)	1.485 <sup>***</sup> (0.181)	1.452 <sup>***</sup> (0.276)	1.440 <sup>***</sup> (0.235)	0.824 (0.515)	1.565 <sup>***</sup> (0.200)
Captured from the wild	0.020 (0.277)	-0.031 (0.172)	0.036 (0.291)	-0.015 (0.221)	0.029 (0.454)	-0.018 (0.197)
Bred in captivity	0.891 <sup>***</sup> (0.242)	0.553 <sup>***</sup> (0.180)	0.551 <sup>*</sup> (0.304)	0.527 <sup>**</sup> (0.227)	0.857 <sup>**</sup> (0.377)	0.502 <sup>**</sup> (0.206)
Singing	0.919 <sup>**</sup> (0.408)	0.995 <sup>***</sup> (0.214)	1.316 <sup>***</sup> (0.326)	0.789 <sup>***</sup> (0.302)	1.105 <sup>**</sup> (0.491)	1.014 <sup>***</sup> (0.247)
Familiarity	1.646 <sup>***</sup> (0.428)	1.674 <sup>***</sup> (0.273)	2.439 <sup>***</sup> (0.512)	1.066 <sup>***</sup> (0.341)	2.636 <sup>***</sup> (0.770)	1.571 (0.288)
Kept by others	1.444 <sup>***</sup> (0.486)	1.268 <sup>***</sup> (0.282)	1.257 <sup>***</sup> (0.472)	1.059 <sup>***</sup> (0.367)	0.216 (1.114)	1.298 <sup>***</sup> (0.283)
Number of observations	2,264	5,782	2,964	2,848	880	4,932
Log likelihood	-608.27	-1439.28	-668.57	-769.25	-202.78	-1243.33
LR Chi <sup>2</sup>	68.73 <sup>***</sup>	166.72 <sup>***</sup>	100.89 <sup>***</sup>	66.67 <sup>***</sup>	31.92 <sup>***</sup>	141.52 <sup>***</sup>

Notes: \*\*\* : p ≤ 0.01; \*\* : p ≤ 0.05; \* : p ≤ 0.10.

**Appendix A6.** Trends of market price and market arrivals  
[multivariate regression estimates]

Variables	Description	Dependent variable	
		Sales price <sup>#</sup> [thousand IDR/bird; <i>nat. logarithm</i> ]	Market arrivals [number of birds entered the market in a month]
<b>Time</b>	Continuous variable. Month of market transaction.	0.001 (0.004)	-2.764 <sup>***</sup> (0.550)
<b>Trainability</b>	As described in Table 1.	0.329 <sup>***</sup> (0.083)	-50.458 <sup>***</sup> (11.238)
<b>Rare</b>	As described in Table 1.	0.284 <sup>**</sup> (0.119)	-66.490 <sup>***</sup> (16.071)
<b>Time x Rare</b>	Interaction term	-0.005 (0.008)	0.642 (1.033)
<b>Model intercept</b>		4.592 <sup>***</sup> (0.096)	166.670 <sup>***</sup> (13.004)
<b>R<sup>2</sup></b>		0.02	0.07
<b>F-value</b>		4.96 <sup>***</sup>	17.51 <sup>***</sup>
<b><math>\chi^2</math> (Breusch-Pagan test of independent equations)</b>		5.21 <sup>**</sup>	

Notes: Number of observations: 880. \*\*\* : p ≤0.01; \*\* : p ≤0.05. Figures in brackets show std. errors.

<sup>#</sup>Adjusted for inflation between 2013 and 2015.

Source: Trade survey data (collected by authors).