Supplementary Table 2. Genes obtained by previous GWA studies for egg and reproductive traits in *Gallus gallus*

Gene	Trait	Reference
AJAP1 *TNFRSF9* *C1ORF174* *CAMTA1* *CEP104* *PDAI1* *SDHB* *DJ-1* *PADI3* *MRPS16*	eggshell blueness	Darwish et al. 2019 [1]
ZNF704 *CA2* *RFT1* *PRKCD* *PDGFD* *DYNC2H1* *DCUN1D5* *FGF9* *KIAA1468* *PHLPP1* *ZCCHC2* *TLL1*	yield of extraembryonic fluid, age at first egg, egg weight	Kudinov et al. 2019 [2]
NCAPG *FGFPB1* *KPNA3* *CDC25A* *WDR48* *BST1* *THSD7B*	egg albumen quality	Qu et al. 2019[3]
DLEU7 *MIR15A* *CECR2* *MEIS1* *SPRED2* *RNASEH2B* *KCNRG* *SPRYD7* *CECR1* *CECR5*	egg weight	Liu et al. 2018[4]
MSX2 *DRD1*	egg quality	Liu et al. 2018[5]

RHOA *SDF4* *TNFRSF4* *TTLL10* *LOC419425* *MIR429*		
FAM184B *HTT* *KCNH7* *CDC42BPA* *KCNIP4* *GJA5* *CBFB* *GPC6* *COG6* *PPARGC1A* *CNKSR2* *MED30* *STK31*	age at first egg , body weight at first egg, egg weight, egg number	Fan et al. 2017[6]
IGFBP3 *GORAB* *CCKAR*	oviduct development	Shen et al. 2017[7]
RGS3 *AMH* *DCLK1* *NBEA* *SMAD9*	follicle number	Shen et al. 2017[8]
ADIPOR2 *LRTM2* *SOX5* *CMAS* *ERC1* *CHUNK-1* *STRAP* *PLCZ1* *AEBP2* *SLCO1A2* *IAPP* *KCNJ8* *GYS2* *SPX* *KRAS* *IQSEC3* *SLC6A12* *WNK1*	eggshell ultrastructure	Duan et al. 2016[9]

CACNA2D4 *DCP1B* *CACNA1C* *BCL2L13* *MICAL3* *BPGM* *CALD1* *RERG* *PTPRO* *EPS8* *DERA* *MGST1* *LMO3* *RERGL* *PLEKHA5* *SLCO1C1* *PYROXD1* *BCAT1* *C2CD5* *ST8SIA1* *LDHB* *LRMP* *LYRM5* *RAD52* *WNT5B* *AKR* *CAPZA3* *TMTC1* *TUBAT* *BICD1* *DENND5B* *SLC6A13* *B4GALNT3* *RASSF8* *SLC15A5* *WASH1* *CYB5R3* *ITM2C* *KNDC1* *GPR123(ADGRA1)*		
DGKQ *SHROOM3* *RBPJ* *TRPC6* *C4*	total egg numbers , egg weight, eggshell thickness, eggshell color	Liao et al. 2016[10]

TRPM8 *MCCC2* *PTPRD* *AUTS2* *ITGA6* *PLCB1* *CCDC82* *LGSN* *EPHX2* *ANKMY1* *APEM1* *POLA1* *DAPK1* *SMYD3* *ARL8A* *LOC10751519* *LOC100857741* *C5H15ORF29* *LOC101751216* *MEF2A* *ELFN1* *LAMC3* *HAS2* *PRL* *PXDN* *SLC8A1* *KATNBL1*		
DOTL1 *GALC* *RPA2* *ACTL9* *ZAP70* *BRCA2* *RFX2* *ONECUT3* *ZAR1* *REXO1* *NRTN* *EML4* *KCNG3* *ADAMTS10* *SCAMP4* *ABHD17A* *ELL* *ENSGALG00000028314*	yolk and ovary weights	Sun et al. 2015[11]

RGS3F *OAZ* *C19orf35* *AP3D1* *MYO1F* *MUC16* *SPG20* *STARD13* *NEK5* *NEK3* *CKAP2* *DHRS12* *ACER1b* *ACSBG2* *ACER1*		
ITPR2 *PIK3C2G* *RECQL* *ABCC9* *CASC1*	eggshell quality	Sun et al. 2015[12]
CAB39L *FOXO1* *CDADC1*	egg weight	Yi et al. 2015[13]
GTF2A1 *STON2* *CLSPN* *FARSB* *KIAA1549* *CALM1* *Gprotein* *GNB2L1* *TRIM27* *GRIK3* *B-G* *TSN* *THYN1* *SEL1L* *OPCML* *SPPL2B* *TCF3* *TAP2* *PLXNB2* *RPS29* *METAP1D* *TLK1*	egg number , egg laying rate and age at first egg	Yuan et al. 2015[14]

ZAK *PPP1R9B* *TRA2B* *ZC3H12A* *RRAGC* *STMN1* *PNISR* *KIAA0776* *ATG5* *NRXN3* *MOGAT1* *MIR1741* *SMG6* *ADORA2B* *SVOPL* *HIPK2* *TAB1* *PFKP* *PPP4R1L* *C3AR1* *PDE3A* *ARNTL2* *PPFIBP1* *HTR2C* *LOC101749001* *DMC1* *ZC3H14* *KCNK10* *TTC7B* *DIO2* *C5H14ORF159* *TTC8* *LOC423393* *NEURL1B* *CDKAL1* *SOX4* *MIR216B* *MIR7463* *RTN4IP1* *MIR6583* *CCDC88C* *POU3F1*		
GRB14 *GALNT1* *ODZ2*	egg production and quality	Liu et al. 2011[15]

ZNF536 *ATM* *LOC418918* *ENOX1* *BLK*		

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