A Comprehensive Guide To Breeding

The Optimal Path To Breeding Perfect Pals

To begin this guide, let's address the first kinds of Pals you're going to want to breed for. The easiest kind, which are available from the very beginning of the game. Chikipi! As soon as you have access to breeding, start breeding Chikipis!

What kind of Chikipis? Ones with each of the <u>good passives</u> in the game. How do you get these? Down-breeding for the passive by matching pals with as few passives as possible until you get an offspring with only your desired passives. Outside of Chikipi's only normal breeding pair (ie. breeding with itself), the only way to inject passives outside those which can be obtained from Chikipis in the wild/breeding mutation, is by breeding a Pal with that passive to a Boss pal, such as Zoe & Grizzbolt(quide).

When it comes to optimizing which pals you select to breed (with the ultimate goal of breeding a perfect IV & Passive Pal) you want to begin by breeding Pals with perfect IVs and only one passive. That sounds simple on the surface, but hard in practice; as often when you find a pal with a perfect IV it's likely to have more than just 1 passive. How do we solve this?

Step By Step Process

Let's say we want to breed a <u>perfect combat Jetragon</u>; desiring Perfect IVs + Divine Dragon, Legend, Musclehead & Ferocious. How do you go from having 4 different Jetragon with perfect IVs, all with Divine Dragon & Legend, one with Musclehead & Conceited, one Swift & Hooligan. In this scenario both Divine/Legend Jetragon are males with 100 melee attack and 100 defense, while the two with 4 passives are female and have 100 shot attack and 100 health. Our first objective is to breed a Pal with 2 of the 4 desirable IVs and/or only desirable passives. Additionally, because Melee Attack and Shot Attack are rolled as one IV, combining them ASAP is recommended.

This means both of our first breeding pairs will involve 6 active variables each. The first with 100 melee attack, 100 shot attack, Legend, Divine Dragon, Musclehead & Conceited; the second with 100 defense, 100 health, Legend, Divine Dragon, Swift & Hooligan.

In the case of our first pair, we want to look for either a male with at least 100 melee and 100 shot, or 100 melee and Musclehead OR a female with 100 melee 100 shot and at least Musclehead. If we get either of these pals, we should swap the current male out for it; as this will increase our odds of getting our most desired offspring of this pair; one with 100 melee, 100 shot and Musclehead, with Divine Dragon & Legend being desirable, and ideally neither Swift or Hooligan.

In the case of our second pair, we want to first breed for an offspring with 100 defense & health, w/ either Legend and/or Divine Dragon, and no other passives. Ultimately we want a pal which is compatible with that of the first pair; aside from being the opposite gender from that of the 1st pair, it must also have complimentary passives. If the first pair produces a 100/100 attack with only Musclehead, then the offspring from the second pair will need both Legend and Divine Dragon, in addition to 100 HP & 100 defense.

With our first(& 1.5th) generation we want to eliminate the unnecessary passives, while combining opposing IVs. This first generation is somewhat forward and thus obvious to many, however the next generation is where many first time breeders will make the wrong move. Many will look to jump straight for a pair of 3/4 IV/double passive mating pairs, but this is a trap!

Instead in our second generation we want to select for pals with $\frac{3}{4}$ IVs and ONE passive. This is because, while the rate of mutations stays the same, having only 1 passive increases the odds of that specific passive being passed down. The more passives involved in a breeding pair, the lower the overall chance of that passive passing down, with just 4 passives in the mix, the chance of inheriting that trait drops to just 10%, but when there are only 2 passives, that rate is 24%; which is more than double!

Just like in the first generation, there are in-between Pals we can look to trade in to increase our odds of getting a pal with a perfect IV & two desirable passives, the first we're likely to find is one with 3 perfect IVs and at least one desirable passive (and ideally no more than 1 undesirable passive), the next is going to be one of the opposite gender with 3 perfect IVs (including the perfect IV it's future partner is missing) and at least one other desirable passive. Once we have this pair we can begin breeding for a pal with perfect IVs and at least one desirable passive (w/ up to 1 undesirable passive). After we get this pal, if using a Male with Musclehead and Hooligan for example, we are going to want to find a female with perfect IVs and Musclehead as well. Let's assume the female we get also has Conceited. Now we breed this pair until we get a Jetragon with perfect IVs and ONLY musclehead. We rinse and repeat this process for Divine Dragon and Legend.

If while breeding for Divine Dragon and Legend we get a perfect IV Divine Dragon/Legend w/ no passives; in this case we don't need to keep breeding for a perfect IV pal w/ only one of the passives. Likewise, if you get a Jetragon with perfect IVs and only the 3 desirable passives, it's no longer necessary to isolate the desired passives. As such, I suggest breeding for perfect IV Jetragons until you either end up with 3 Jetragon w/ perfect IVs, each with one of the 3 desired passives OR 1 Jetragon w/ perfect IVs 2 desirable passives and 1 w/ perfect IVs and the 3rd desirable passive OR a Jetragon w/ perfect IVs and all 3 passives.

By following this strategy of having more than one desirable offspring per generation; we are increasing our odds of finding one of these pals; each of which will enable us to increase our chances of getting the Ideal perfect IV/3 passive pal.

But what about Ferocious? Depending on the breeding pairs you end up with from the previous generation, your odds will vary, where as the most optimal way to introduce Ferocious into this gene pool is to breed a Jetragon w/ Ferocious (either caught, or hatched via mutation) with perfect IVs and only 1 of the desirable passive(Musclehead) and breed for either a Jetragon w/ perfect IVs and Ferocious or Ferocious/Musclehead. You can swap the Ferocious breeder out for offspring with Ferocious and better IVs to increase the odds of getting one with Ferocious and perfect IVs.

Now with all desired passives isolated to just 2 pals with Perfect IVs and no other undesirable passives; we can breed these two together; giving us the maximum odds (1/46) of getting that perfect combat Jetragon.

Process Summary

As you may have gleaned from the step by step process, especially if you've attempted to breed for passives, they are more challenging to breed for than IVs; thus it is ideal to breed for IVs first, and inject passives later. This is why at the beginning of the guide I strongly encourage catching/breeding Chikipis for desirable passives. As for why Chikipis specifically, because breeding perfect Chikipi's are half of the equation to being able to eliminate 90% of the step-by-step process, and being able to jump directly to breeding perfect IV/Passive versions of all but a select few Pals. If you're enough of a madlad/completionist to consider even trying to breed perfect versions of every Pal; this guide is for you; us.

Author's Note to Reader

If you are reading this guide, and find it helpful; please feel free to share any and all suggestions you have for expanding upon/streamlining concepts conveyed or you spot inconsistencies; please feel free to make notes with your edits. I appreciate those who have already contributed with helpful edits; thank you!

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1. Intro

This is a quick, easy, one stop shop for everything of relevance to breeding in Palworld. In this guide I will detail the most optimal path to pursue easily obtaining "Perfect" Pals. I'm a pro-mod gamer, primarily QoL mods; and in the case of breeding there are a fair few that I will be recommending. And some which are all but a necessity for those who want to breed, genuinely perfect pals. This guide also contains a key for searching where any given pal is by "generation."

2. Pal Generational Theory

This section provides a thorough explanation of why Chikipi & Blazamut are the ideal Pals to begin endgame breeding with. As well as the ideal path for obtaining all the best Pals.

2.a. LUCAs

Generations are measures of distance from the male and female LUCA. As many know, Pal cross breeding is determined via an equation; based upon the "breeding power" of the Pal. The higher the number, the more common/weaker the pal, the lower the number the rarer/stronger the Pal.

This means there is a Pal with the highest score, and the lowest score. These Pals are Chikipi and Blazamut. This makes them the game's current LUCA Major (Chikipi) and LUCA Minor (Blazamut). Incidentally, there are only two ways to hatch a Chikipi or a Blazamut; and in Chikipi's case that involves exploiting a glitch to catch a tower boss. There's also a mod called "Capturable tower bosses" which provides a more fair/balanced approach to catching the tower bosses. Lastly, In addition to the LUCA Minor and LUCA Major, there is the LUCA Prime,

Tombat who is the initial offspring of Chikipi & Blazamut. By line-breeding these 3, to their offspring, 78 of the 130 interbreedable Pals can be obtained. By breeding all the "Perfect Breeders" for these 3 pals, you will be able to dramatically increase your odds of obtaining new "Perfect Breeders" across over 78 Pals.

2.b. LUCA Major

LUCA Major being able to be bred from a tower boss enables you to transfer Lucky/Legend passives into Chikipi. These are the two most important traits in the entire game. So you will want to propagate them into each generation, as they will be on all your future workers fighters and (in case of Legend) runners. The only unit not benefited by Legend is farm animals; who only benefit from San/hunger; which becomes moot with good beds (in pens).

2.c. LUCA Minor

LUCA Minor on the other hand, has a far more nuanced approach to getting Lucky, and a relatively easy way of obtaining Legend. Lucky needs to be bred into a Suzaku, then into Suzaku Aqua, then bred with Blazamut to produce a lucky Blazamut. In the case of getting legend, Simply breed Blazamut to any Legendary Pal and produce a Suzaku, breed Suzaku & Jormuntide for Suzaku Aqua.

2.d. LUCA Prime

In addition to Chikipi & Blazamut, Tombat is the 3rd and final LUCA. As the offspring of Chikipi & Blazamut, Tombat's breeding power is at the dead center of the chart (750). Thus, the vast majority of pals in the game can be produced through breeding with either a Chikipi, Blazamut or Tombat.

2.e. Exclusive Lineages

There are 6 Pals which can only be bred via two parents of the same type; those being the legendary Pals, Jetragon, Frostallion, Paladius, & Necromus, in addition to Jormantide Ignis. Additionally, Gumoss Flower cannot be bred by any means.

2.f. Perfect Breeders

A Perfect Breeder is a Pal which has perfect IVs & only desirable passives. Perfect Breeders are not to be confused with Perfect Pals, but rather the best Pals to use to maximize your chances of breeding Perfect Pals. Due to the primary difference between a Perfect Breeder and a less-than-perfect breeder is the difference in their passives, these combinations can be broken down into two groups, 1/4 Passives and 2/4 Passives. Which Perfect Breeders are desirable also varies by generation; which is addressed in Passive Generation IDs.

1/4 Passives

Of the 53 beneficial passives, 23 are absolute must haves, while the remaining 31 are either inferior versions of the 23, or are only needed for niche/fringe builds, so are not required to be bred through all generations.

The 23 Must Have Passives:

Legend, Lucky, Ferocious, Musclehead, Artisan, Serious, Work Slave, Workaholic, Positive Thinker, Dainty Eater, Diet Lover, Swift, Runner, Nimble, and the Elite Elemental (or "EE") Passives.

2/4 Passives

The best 2/4 Passives are simply the most optimal pairs of the 23 must have passives.

There are 17 ideal pairs of the passives:

Legend/Lucky, Ferocious/Musclehead, Artisan/Serious, Lucky/Work Slave, Workaholic/Positive Thinker, Dainty Eater/Diet Lover, Legend/Swift Runner/Nimble and the 9 different Legend/EE pairs.

This breeding strategy also works out perfectly for storage purposes, as it results in 40 different perfect breeders; just enough to fill a single Viewing Cage.

Perfect Breeder Categories

Perfect Breeders are required on which Pals across the 8 generations of Pals. To help simplify which traits need to be transferred where, and avoid having 40 perfect Breeders of basically every Pal, the passives can be broken down into 5 categories; Combat Specialists, Combat Generalists, Mounts, Workers and Farmers.

Combat Specialist Passives

The largest category of 22 of the 38 Perfect Breeders, including all combinations of Legend, Ferocious, Musclehead, and the 9 EE passives.

Combat Generalist Passives

6 Perfect Breeders fit into this group;

Legend, Ferocious, Musclehead, Lucky, Lucky/Legend & Ferocious/Musclehead

Mount Passives

6 Breeders fit into this group;

Legend, Swift, Runner, Nimble, Legend/Swift & Runner/Nimble

Worker Passives

Artisan, Serious, Lucky, Workslave, Artisan/Serious, Lucky/Workslave

Farmer Passives

Diet Lover, Dainty Eater, Workaholic, Positive Thinker, Diet Lover/Dainty Eater, Workaholic/Positive Thinker

Passive Generation IDs

Passive Generation IDs are a series of up to 5 number/letter combinations, The numbers indicate whether only (2)/4 passives are required, or both (1)/4 and 2/4 are recommended, 5 categories of Passives, Combat (S)pecialists, Combat (G)eneralists, (M)ounts, (W)orkers & (F)armers. I recommend using this to help limit how many Perfect Breeders you'll otherwise end up needing to store by generation 4.

The (S)pecialist identifier is handled uniquely, due to all the Elemental buffs, which need to be distributed across all the different pals, and accounting for 18 of the 40 breeders. To minimize spreading unnecessary EEs to pals who can't benefit from them, any time an asterisk follows

S*, it means not all EE combinations are required. S* by itself indicates that only the Elemental passive of the Pal's type(s) are required. If more than one EE is required, after the Passive ID will be a Specialist code; {(N)ormal, (Da)ark, (Dr)agon, (I)ce, (F)ire, (W)ater, (E)lectric, (Go)round, (Ga)rass}. Keep in mind that even if a pal may benefit from a certain EE passive itself, what determines which S* passives any given Pal should have, depends upon the pals that you will breed from that Pal in the future.

Examples;

Tombat(750)[1S1G1M1W1F] Tombat's Passive Generation ID indicates requiring 1/4 and 2/4 passive combinations of all 5 categories of passives.

Grizzbolt(200)[2S*2G2W] Grizzbolt only requires 2/4 passive combinations of Specialist, Generalist and Worker. The S* tells us that of the 9 EE passives, Grizzbolt only needs the electric type EE,Lord of Lightning, passed to it.

Pengullet(1350)[2S*2G2W] While Pengullet's ID is the same as Grizzbolt; it's worth noting that Pengullet has two types, Water & Ice. In this case S* indicates to breed both Lord of the Sea and Ice Emperor EEs.

Lyleen(250)[2S*2G2W]{Da} Lyleen's S code indicates she needs the (Da)rk EE Lord of the Underworld. Its

Lyleen Noct(210) In the case of Lyleen Noct, there is no Passive ID, nor Specialist code. This indicates that Lyleen Noct is not required for breeding pals other than Lyleen Noct. Thus no Lyleen Noct perfect breeders are required.

2.h. Generational Breakdown

All 130 breedable pals are breedable within 8 generations (labeled G0-G7) of Chikipi & Blazamut, with each generation being further broken down into either "Primary" or "Delta" breeding pairs. Primary pairs are those which utilize either Chikipi, Blazamut, or Tombat to produce the desired Pal offspring, while Delta pairs require two non-LUCA Pals.

Despite all pals being spread across 8 generations, many delta pairs may require more breeding pairs than the generation the offspring can be obtained from. To give one of the most extreme cases, despite Orserk being a "Gen8" Pal, you will have to progress through 13 breeding pairs before getting to Orserk. This is because the generations are divided based upon all possible Pals obtainable by only using combinations of Pals from the previous generations.

2.i. Generational Tree

Be sure to read the <u>Passive Generation IDs</u> section Before looking at the Generational Tree, in order to understand the code system. That said, understanding the Generational Tree is not necessary to utilizing this guide. Rather it is present as a reference section for tracing the Pals you will need in order to pursue certain categories of Passives within the breeding tree.

<u>Section 5.c.</u> breaks down breeding Specialists, Farmers and Mounts. Because every pal can be a generalist, or worker these are not covered in Section 5.c.; thus are not covered. Though all Pals are included in their respective Elemental Specialist section.

Gen 0

Chikipi(1500)+Chikipi(1500)=**Chikipi**(1500)[1S1G1M1W1F] Blazamut(10)+Suzaku Aqua(30)=**Blazamut**(10)[1S1G1M1W1F] **Gen1**

Primary

Chikipi(1500)+Blazamut(10)=**Tombat**(750)[1S1G1M1W1F]

Gen2

Primary

Chikipi (1500)+Tombat(750)=**Rushoar**(1130)[1S1G1M1W1F] Blazamut(10)+Tombat(750)=**Ragnahawk**(380)[1S1G1M1W1F]

Gen3

Primary

Chikipi(1500)+Rushoar(1130) = **Bristla**(1320)[1S1G1M1W1F] Chikipi(1500)+Ragnahawk(380)=**Lovander**(940)[1S1G1M1W1F] Blazamut(10)+Rushoar(1130)=**Anubis**(570)[1S1G1M1W1F] Blazamut(10)+Ragnahawk(380) = **Helzephyr**(190)[1S1G1M1W1F]

Gen4

Primary

Chikipi(1500)+Bristla(1320)=**Sparkit**(1410)[1S1G1M1W1F]
Chikipi(1500)+Lovander(940)=**Fuddler**(1220)[1S*1G1M1W]{NDaIFWEGoGa}
Chikipi(1500)+Anubis(570)= **Galeclaw**(1030)[1S*1G1W1F]{NDaIFWE}
Chikipi(1500)+Helzephyr(190)=**Digtoise**(850)[1S1G1M1W]
Blazamut(10)+Bristla(1320)=**Vanwyrm**(660)[1S*1G1M1W1F]{NDaIFWGoGa}
Blazamut(10)+Lovander(940)=**Wumpo Botan**(480)[1S*1G1M1W1F]{NDaIFWGoGa}

Tombat(750)+Helzephyr(190)=**KingPaca**(470)[1S*1G1M1W]{NIWEGa} Blazamut(10)+Anubis(570)=**Relaxaurus**(280)[1S*1G1M1W1F]{NDaDrIFWE} Blazamut(10)+Helzephyr(190)=**Cryolinx**(130)[1S1G1M1W2F]

Delta

Bristle(1320)+Anubis(570)=**Loupmoon**(950)[2S*2G2W]{N} **Frostallion**(120)+Helzephyr(190)=**Frostallion Noct**(100)

Gen5

Primary

Chikipi(1500)+Sparkit(1410)=**Cremis**(1455)[1S*1G1M1W1F]{NDaDrIWEGa}

 $Chikipi(1500) + Fuddler(1220) = \textbf{Jolthog}(1370) [1S*1G2M1W1F] \{NDaIFWGa\}$

Chikipi(1500)+Galeclaw(1030)=**Kelpsea**(1260)[1S*1G1W1F]{NDaIFWE}

Chikipi(1500)+Digtoise(850)=**Nox**(1180)[1S*1G1M1W]{NIFWGo}

Chikipi(1500)+Vanwyrm(660)=Cawgnito(1080)[1S*1G1W]{DaF}

Chikipi(1500)+Wumpo Botan(480)=**Verdash**(990)[2S*2G2W]{WGa}

 $Tombat(750) + Fuddler(1220) = \textbf{Fenglope}(980)[1S*1G2M1W]\{NDaFWGoGa\}$

Chikipi(1500)+Relaxaurus(280)=**Melpaca**(890)[2S*2G2W2F]

Chikipi(1500)+Cryolinx(130)=**Dinossom**(820)[2S*2G2M2W]{DrFE}

Tombat(750)+Digtoise(850)=Chillet(800)[1S*1G2M1W]{Da}

 $Tombat(750)+Vanwyrm(660)=Blazehowl(710)[1S*1G1M1W]{NDaIF}$

 $Tombat(750) + Relaxaurus(280) = \textbf{Penking}(640)[1S*1G1M1W]\{Da\}$

Tombat(750)+Wumpo Botan(480)=Incineram(590)[2S*2G2W]{Da}

Tombat(750)+Cryolinx(130)=Sibelyx(450)

Ragnahawk(380)+Wumpo Botan(480)=Mossanda(430)[1S*1G1M1W]{DaDrEGa}

Blazamut(10)+Vanwyrm(660)=Elizabee(330)[1S*1G1M1W]{NGo}

Blazamut(10)+Wumpo Botan(480)=**Menasting**(260)[1S*1G1M1W]{DaIGa}

 $Blazamut(10)+Kingpaca(470)=Beakon(220)[1S*1G1M1W]{WGa}$

Blazamut(10)+Relaxaurus(280)=**Astegon**(150)[1S*1G1M1W]{DaF}

 $Blazamut(10)+Cryolinx(130)=Suzaku(50)[2S*2G2M2W]{DaWGa}$

Delta

Rushoar(1130)+Sparkit(1410)=**Kelpsea Ignis**(1270)[2S*2G2W]{E}

Bristla(1320)+Digtoise(850)=**Gobfin**(1090)[2S*2G2W]{DaF}

Rushoar(1130)+Loupmoon(950)=**Gorirat**(1050)

Rushoar(1130)+Vanwyrm(660)=**Dumud**(895)[2S*2G2M2W]{WGo}

Cryolinx(130)+Sparkit(1410)=**Foxcicle**(760)[2S*2G2M2W]{IGo}

Cryolinx(130)+Fuddler(1220)=Univolt(680)[2S*2G2W]{GoGa}

Cryolinx(130)+Bristla(1320)=**Rayhound**(740)[1S*1G1M1W]{DrE}

Cryolinx(130)+Rushoar(1130)=**Bushi**=(640)[1S*1G1M1W]{DaIFGoGa

Cryolinx(130)+Lovander(940)=**Elphidran**(540)[1S*1G1M1W]{DrIWGaGo}

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Cryolinx(130)+Digtoise(850)=Cinnamoth(490)
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Cryolinx(130)+Vanwyrm(660)=Sweepa(410)

Cryolinx(130) + Anubis(570) = Quivern(350)

Cryolinx(130)+Wumpo Botan(480)=**Jormuntide**(310)[2S*2G2M2W]{NW}

Cryolinx(130)+KingPaca(470)= **Mammorest**(300)[2S*2G2M2W]{I}

Ragnahawk(380)+KingPaca(470)=**Nitewing**(420)

Anubis(570)+Vanwyrm(660)=**Faleris**(370)[1S*1G1M1W]{WGoGA}

Sparkit(1410)+Relaxaurus(280)=**Relaxaurus** Lux(270)[2S*2G2M2W]{N}

Gen6

Primary

Chikipi(1500)+Cremis(1455)=Mau(1480)[2S*2G2W2F]{IW}

Chikipi(1500)+Jolthog(1370)=**Lifmunk**(1430)[1S*1G1W]{NF}

Chikipi(1500)+Kelpsea(1260)=**Depresso**(1380)[1S*1G1W]{F}

Chikipi(1500)+Nox(1180)=**Tocotoco**(1340)[1S*1G1M1W]{IGo}

Chikipi(1500)+Cawgnito(1080)=**Killamari**(1290)[2S*2G2W]{F}

Chikipi(1500)+Verdash(990)=Tanzee(1250)

Chikipi(1500)+Fenglope(980)=Gumoss(1240)

Chikipi(1500)+Melpaca(890)=Woolipop(1190)

Chikpi(1500) + Dinossom(820) = Wixen(1160)

Chikipi(1500)+Chillet(800)=**Maraith**(1150)[2S*2G2W]

Chikipi(1500)+Blazehowl(710)=Lunaris(1110)[1S*1G1W]{I}

Chikipi(1500)+Bushi(640)=**Beegarde**(1070)

Chikipi(1500)+Elphidran(540)=**Robinquill**(1020)[2S*2G2W]{Go}

Chikipi(1500)+Penking(520)=**Felbat**(1010)[2S*2G2M2W]

Chikipi(1500)+Faleris(370)=Caprity(930)

Chikipi(1500)+Elizabee(330)=**Eikthyrdeer**(920)[2S*2G2M2W]{Go}

Chikipi(1500)+Jormuntide(310)=Mozzarina(910)

Chikipi(1500)+Menasting(260)=**Reindrix**(880)[2S*2G2M2W]

Chikipi(1500)+Beakon(220)=**Broncherry**(860)[2S*2G2M2W]{WGa}

Chikipi(1500)+Astegon(150)=**Kitsun**(830)[2S*2G2M2W]{Da}

Tombat(750) + Dinossom(820) = Arsox(790)

Blazamut(10)+Fenglope(980)=Azurobe(500)

 $Blazamut(10)+Blazehowl(710)=Pyrin(360)[2S*2G2M2W]{DaF}$

Blazamut(10)+Bushi(640)=**Reptyro**(320)[2S*2G2M2W]{IGo}

Blazamut(10)+Univolt(680)=Warsect(340)

Tombat(750)+Jolthog(1370)=**Direhowl**(1060)[2S*2G2W]

Tombat(750)+Verdash(990)=Celaray(870)

Tombat(750)+Bushi(640)=**Katress**(700)[2S*2G2M2W]

Tombat(750)+Faleris(370)=**Surfent**(560)[2S*2G2M2W]{Go}

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Tombat(750)+Relaxaurus Lux(270)=Grintale(510)
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Delta

Rushoar(1130)+Kelpsea Ignis(1270)=**Dazzi**(1210)

Rushoar(1130)+Nox(1180)=**Rooby**(1155)[1S*1G1M1W]{FW}

Ragnahawk(380)+Elphidran(540)=**Wumpo**(460)[2S*2G2M2W]

Bristle(1320)+Cremis(1455)=**Hoocrates**(1390)[2S*2G2W]{N}

Cremis(1455)+Kelpsea(1260)=**Pengullet**(1350)[2S*2G2W]{I}

Dinossom(820)+Rayhound(740)=**Dinossom Lux**(810)

Mossanda(430)+Rayhound(740)=Grizzbolt(200)[2S*2G2M2W]{DrE}

Cremis(1455)+Bushi(640)=**Vaelet**(1050)

Jolthog(1370)+Gobfin(1090)=Daedream(1230)

Vanwyrm(660)+Foxcicle(760)=Vanwyrm Cryst(620)

Fenglope(980)+Kelpsea(1260)=Leezpunk(1120)[2S*2G2W]{NDaF}

Suzaku(50)+Jormuntide(310)=Suzaku Aqua(30)

Frostallion Noct(100)+Cremis(1455)=**Petallia**(780)[1S*1G1W]{DaGa}

Gen7

Primary

Chikipi(1500)+Mau(1480)=**Teafant**(1490)

Chikipi(1500)+Lifmunk(1430)=Lamball(1470)[2S*2G2W]

Chikipi(1500)+Hoocrates(1390)=Vixy(1450)[2F]

Chikipi(1500)+Killamari(1290)=Foxparks(1400)

Chikipi(1500)+Rooby(1155)=Fuack(1330)[2S*2G2M2W]{WGa}

Chikipi(1500)+Lunaris(1110)=Swee(1300)[2S*2G2W]

Chikipi(1500)+Direhowl(1060)=**Flopie**(1280)

Chikipi(1500)+Leezpunk(1120)=**Ribbuny**(1310)

Chikipi(1500)+Tocotoco(1340)=**Hangyu**(1420)(250)[2S*2G2M2W]{I}

Delta

Lifmunk(1430)+Depresso(1380)=Flambelle(1405)[2S*2G2W]

Mau(1480)+Pengullet(1350)=Mau Cryst(1440)

Fuddler(1220)+Robinquill(1020)=**Robinquill Terra**(1000)

Jolthog(1370)+Pengullet(1350)=**Jolthog Cryst**(1360)

Blazehowl(710)+Felbat(1010)=**Blazehowl Noct**(670)

Gobfin(1090)+ Rooby(1155)=**Gobfin Ignis**(1100)

Incineram(590)+Maraith(1150)=Incineram Noct(580)

Surfent(560)+Dumud(895)=**Surfent Terra**(550)

Elphidran(540)+Surfent(560)=**Elphidran Aqua**(530)

KingPaca(470)+Reindrix(880)=Ice KingPaca(440)

Mossanda(430)+Grizzbolt(200)=Mossanda Lux(390)

Pyrin(360)+Katress(700)=Pyrin Noct(240)

Reptyro(320)+Foxcicle(760)=**Ice Reptyro**(230) Mammorest(300)+Wumpo(460)=**Mammorest Cryst**(290) Mossanda(430)+Petallia(780)=**Lyleen**(250)[2S*2G2W]{Da} Grizzbolt(200)+Relaxaurus(280)=**Orserk**(140) Kitsun(830)+Astegon(150)=**Shadowbeak**(60)

Gen8

Primary

Chikipi(1500)+Lamball(1470)=**Cattiva**(1460)

Delta

Leezpunk(1120)+ Flambelle(1405)=Leezpunk Ignis(1140) Eikthyrdeer(920)+Hangyu(1420)=Eikthyrdeer Terra(900) Broncherry(860)+Fuack(1330)=Broncherry Aqua(840) Hangyu(1420)+Swee(1300)=Hangyu Cryst(1422) Lyleen(250)+Menasting(260)=Lyleen Noct(210)

3. IV Hunting

When it comes to hunting for high IV pals there are a few mods (some HIGHLY recommended) that need to be covered first. I will cover these in order from least to most powerful. Then briefly cover how best to hunt for Pals with perfect IVs.

3.a. IV Mods

Pal IVS

Pal IVs is a mod by ThisIsZac which allows you to view your Pal's IVs when looking at them in your Palbox. This mod will allow you to quickly sort through all the Pals you've just captured (regardless of their level) to quickly determine if any of your Pals are worth keeping for breeding. Pal IVS displays a number after your HP, Attack and Defense stats between 0-100. Later on, this also makes it much easier to determine whether the Pal you've just bred have good or bad IVs, without the hassle of having to level the Pal up, then punch its stats into an IV calculator, to get a rough estimate of its IVs.

Pal Analyzer

Similar to Pal IVS, Pal Analyzer allows you to view the health, attack and defense IVs of Pals, unlike Pal IVS however, this mod allows you to view the IVs of wild Pals before you catch them. This can save you hours of farming/crafting balls & butchering/condensing Pals while aimlessly hunting for Pals with perfect IVs.

Pal Info

Pal Info functions identically to Pal Analyzer, with one CRITICAL exception; Pal Info allows you to see both attack IVs. In the vanilla game and with the prior mods there is no way to view your Pal's "Melee" attack IV, instead the attack IV you're shown is your "Shot" IV. So for those wanting to breed truly perfect Pals, Pal Info is currently the only means (outside of save file viewers) of viewing all 4 of a Pal's IVs.

Recommended Mods

I recommend using both Pal IVS and Pal Info so that you can see most of your Pal's IV information on the fly in the Palbox, and be able to see your Pal's melee IV. The process of obtaining your first perfect Pal can be an extremely long process; even with the use of the above mods, it will likely take you several hours, if not days, to hunt down pals with a 100 IV in each of the 4 stats. These mods merely provide you with information the average player would not otherwise be able to determine at a glance.

3.b. Hunting Tips

Pal Spawn Rate

When hunting for max IV pals, best practice (regardless of whether you intend to use mods or not) is to increase Pal Spawn Rate to max. More Pals = more chances at a Pal with a perfect IV.

Hunting Chikipi

Hunting Chikipi is far and away the easiest Pal to get perfect IVs on, regardless of whether you choose to use mods or not. With a high enough Lifmunk effigy level you should have a 100% capture rate on full hp Chikipis. Combine this with how common they are all over the starting areas, and the time invested depends purely on RNG.

Hunting Blazamut

Unlike Chikipi, farming perfect IV Blazamuts is a far more daunting task. This is due to the fact that Blazamut can only be found in 2 locations; The North Eastern Wildlife Sanctuary Island and the Alpha Blazamut on the Volcano Island.

Due to the extremely low chances of Blazamuts spawning on the Sanctuary Island, and Alphas' IVs being rolled between 50-100 (instead of the normal 0-100) it is far more efficient to farm the Alpha Blazamuts for perfect IVs.

If you're using Pal Info, this can be done by running through the cave until you can check the Blazamut's IV levels, if it doesn't have a perfect IV you need, you can simply run out all the way out of it's layer, all the way to the wooden fence outside the lair, then go back in to reroll the Blazamut's IVs.

If you're playing without mods, and have Pal Spawn Rate set to 3, you can catch 2 of the Alpha Blazamuts, then leave the lair with 1 still alive. Leave the lair as explained above, then re-enter and there will be 3 Blazamuts again; rinse, repeat.

Hunting Jormuntide Ignis

Because Jormuntide Ignis can not be bred from any Pals other than a pair of Jormuntide Ignis, you will need to farm perfect IVs for them separately from the rest of your Pals. Thankfully, they are one of the most common spawns on the Northwestern Sanctuary Island. This makes it relatively easy to farm perfect IVs by doing laps around the island, until a perfect IV Jorm Ignis spawns. It is also worth noting, that you will also want to look for a Lucky Jorm Ignis, as there is no way to transfer the Lucky trait to Jorm Ignis from another pal.

Hunting Legendary Pals

Similarly to Jormuntide Ignis, none of the legendary Pals can be obtained via cross-breeding. So they will also have to be hunted separately to get perfect IVs on them. I recommend saving these Pals for last; simply due to how challenging and time consuming it will be to not only find Legendaries with perfect IVs, but catch them as well.

Hunting Elite Passives

There are 9 Elite Passives in the game; 4 of which are on the legendary Pals. The other 5 can be found on Orserk, Lyleen, Alpha Anubis, Alpha Jormuntide and Alpha Blazamut. Orserk and Lyleen can both be captured on the Northeast Sanctuary Island. These 9 passives are the best type-damage multiplier passives in the game; which makes them essential for maximizing the damage potential of certain Pals (like Pengullet). There is no need to farm for perfect IVs on these pals, you only need them for their Elite Passive, which you can transfer to a perfect IV pal later.

4. IV Breeding

IV Breeding can seem daunting at surface level. And even with good RNG can be a very time consuming process. There are a few server settings & mods which you can utilize to customize the breeding process to your wishes.

4.a. Breeding Mods

Faster Hatch Press (Instant)

I can not recommend this mod by MoxxyHaven enough. Instead of having to hold down F for 10(?) seconds to hatch your egg, you can simply tap F and it instantly hatches. This does not circumnavigate the hatch timer; so if you do not have your server hatch time set to 0, you will still have to wait on the incubation timer. While 10 seconds may not seem like a long time, after ~500 eggs (estimated hatches to get your first perfect 4/4 IV 4/4 Passive Pal) you will have spent an hour and 23 minutes holding your F key.

Faster Breeding

Aside from the incubation time, the other major time dependent process is breeding itself. The default breed time is 5 minutes. This means at the very most, you can only get 288 eggs over the course of 24 hours of continuous play. Personally, I find that too much to stomach. Thankfully, Faster Breeding allows you to pick between 150 seconds, 60 seconds, 30 seconds, 10 seconds or 1 second breeding times. Personally, I run with a 30 second timer, as it's just long enough to keep pace with how fast my cake factory can keep my breeding farm in operation.

4.b. Breeding Tips

With so many layers to improving Pals, it can quickly feel overwhelming determining the most efficient way to breed for perfection. With so many guides and videos already existing on the subject, utilizing datamined statistics and maths (thanks to mgxts https://www.reddit.com/r/Palworld/comments/1af9in7/passive_skill_inheritance_mechanics_in_breeding/) one would think the answer would be straight forward. Unfortunately due to some well intentioned individuals who failed to proof-check their own work, there's bad data and analysis out there on this subject, which can make the process even more confusing. Thankfully the actual process of breeding is quite straightforward and relatively intuitive.

Let's say we want to start with breeding a perfect Chikipi. We've already hunted down 4 different Chikipis; each having one perfect IV; Melee, Shot, Health & Defense. We'll begin by breeding our perfect Melee and Shot Chikipis until both IVs appear on one of their offspring. We want to breed Melee/Shot together ASAP because once combined; these IVs will both be the same as each other on all successive generations (due to them both sharing the same IV generator). If your perfect IV Chikipis are both female (or male), simply breed one of them to any male until you get their perfect IV on a male (or female) offspring. If you're able to run two breeding pens at the same time, you can work towards getting your perfect Health/Defense IVs on another Chikipi at the same time; to save time.

Once you have two opposite gender Chikipis; one with perfect Melee/Shot & 1 with perfect Health/Defense start breeding them together. Eventually you'll get an offspring with 3/4 perfect IVs, when this happens, swap it into your breeding pen. Once you get a male and female 4/4 IV Chikipi, you'll be ready to start breeding for passives.

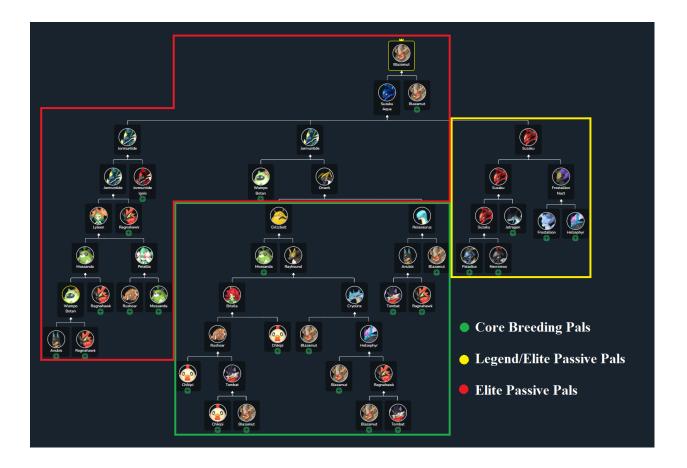
4.c Optimal Path for Breeding Perfection

5. Breeding Passives

When it comes to breeding perfect pals, passives should be saved for the end. This is because while breeding for a pal with perfect IVs, you will likely hatch many imperfect Pals with near-perfect IVs but desired passives. By utilizing these near-perfect IV Pals with ideal passives, you can more quickly obtain perfect pals with those ideal passives. Moreover, the more perfect Pals you breed, the more perfect pals with just 1-2 ideal Passives you'll end up with; which will make obtaining other perfect IV/Passive pals easier.

Personally, I recommend breeding Chikipis and Blazamuts until you have breeders with perfect IVs and Lucky/Legend, Ferocious/Musclehead, Serious/Artisan, Swift/Runner, Positive Thinker/Workaholic, and Diet Love/Dainty Eater. The benefits of doing this are two fold. Firstly, because your Chikipi and Blazamut will be your first pals with perfect IVs, breeding their perfect IV pairs for passives will have the highest possible probability of producing offspring not only with the desired passives, but perfect IVs. The knock-on benefit of this, is once your LUCA pals have perfect IVs/Passives it's now significantly easier to get perfect IV/Passives on 95% of the other pals.

5.a. Integrating Elite Passives



Legendary Pals

Take note of this breeding chart; it depicts the shortest path to transferring Elite Passives into your general breeding pool. Focusing on the yellow box on the right side of the chart we can see that breeding any two legendaries together (or breeding them with a Suzaku) will produce a Suzaku. Then by breeding Suzaku with Jormuntide we get Suzaku Aqua; which we can then breed with Blazamut to get a Blazamut. This will give our Blazamut (and thus all its offspring) access to all 5 passives exclusive to the legendaries; Legend, Celestial Emperor, Divine Dragon, Ice Emperor & Lord of the Underworld.

There are two equally viable paths to transferring Elite Passives from legendary Pals to your perfect IV Pals; either focusing purely on getting the passives transferred to the desired Pal, then breeding that Pal with your existing perfect IV Pal, or breeding Perfect IVs on each of your legendary Pals. The first option is the quickest/lowest friction choice, while the latter involves a task you will likely want to undertake at some point regardless.

Elite Passive Pals

In the case of Elite Passives on non-legendary Pals (ie; Blazamut, Lyleen, Jormuntide, Anubis & Orserk) the best practice will be to breed a perfect IV partner to breed with the Pal with the desired Elite Passive. Use the same logic as applied in the IV breeding section; only this time with the added prerequisite of the offspring also needing to have the elite passive, in addition to 1, 2, 3, 4 perfect IVs.

Core Breeding Pals

The breeding chart above also highlights what I call the "Core Breeding Pals." By breeding all of the pals within the green box (including Wumpo Botan), you will have the ability to not only integrate all elite passives into your perfect IV lineages, but have access to breeding all the best workers for each task; Frostallion for chilling, Frostallion Noct for harvesting, Blazamut for mining, Wumpo Botan for hauling and lumber, Lyleen for planting and medicine, Jormuntide for watering, Jorm Ignis for kindling, Orserk for electricity, and Anubis for crafting.

5.b. Chikipi & Elite Passives

As already mentioned in the LUCA section, Chikipi is unique among Pals in that it can only be bred via two Chikipi or by breeding a tower boss with another Pal. By breeding a Pal with an Elite Passive with a tower boss, you will be able to pass the Elite Passives to a Chikipi. The downside to getting elite passives on Chikpi is that Tower Bosses' IVs are all 0. So you will likely want to condense all 11 Elite Passives (Elemental Buffs, Lucky & Legend) onto 3-6 Chikipis before breeding them with your perfect IV Chikipis, to minimize the number of eggs you'll have to go through before having all 11 Elite Passives on perfect IV Chikipis.

5.c Optimizing Passive Propagation

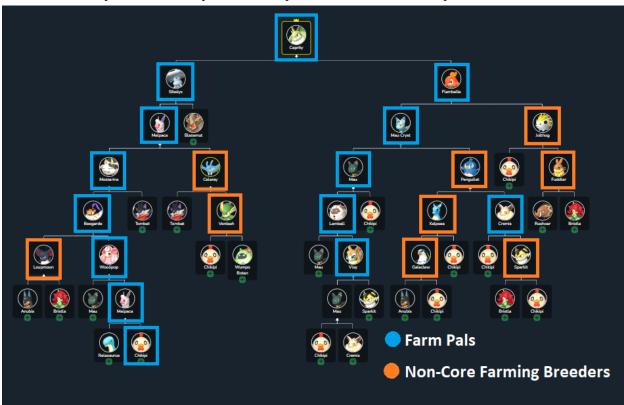
So, you've filled out your core breeders, gotten all the Elite Passives onto Blazamuts & Chikipis, what's next? Breeding perfectly optimized Pals, of course! But that's easier said than done. After all, different Pals benefit more from different passives. While having Lucky/Legend/Ferocious/Musclehead on a Chikipi might produce the hardest hitting Chikipi, Chikipi isn't exactly well suited for combat; even with perfect IVs/Passives. So this section will break down how to efficiently propagate meta passive combos around to their ideal Pals.

Farm Pals

Farm Pals are unique among base Pals in that Passives such as Artisan provide zero bonus to their production efficiency. And due to most of them being exceptionally weak, even with perfect IVs/combat Passives, there's equally no point to utilizing passives that contribute to their survival. Instead, it's best to focus on reducing the time they'll be doing anything other than working. There are 3 options for passive buffs that help reduce downtime for farm Pals; those which increase movement speed, reduce SAN loss and reduce appetite.

If you build beds and storage boxes for your farm pals in their ranch (which is optimal) movement speed becomes all but irrelevant compared to SAN loss and reduced appetite. Which leaves us with just 4 passives viable for Farm Pals, Diet Lover, Dainty Eater, Workaholic and Positive Thinker. But how do we get these passives onto all 13 farm pals?

Assuming you've finished perfecting all your Core Breeding Pals in section 5.a the following chart will allow you to transfer your desired passives across all these pals.



Before focusing on passing your desired passives through the Farm Pals, I recommend breeding perfect IVs into all the Non-Core Farming Breeders first. This will help avoid bottlenecks and keep your Palbox relatively clean when you begin pushing your desired passives into your Farm Pals.

Mount Pals

Elemental Pals